

Keith L. Hansen

BIG COTTONWOOD

WATER RIGHTS

JUNE 1935

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BIG COTTONWOOD INVESTIGATION

BIG COTTONWOOD CREEK

The original water supply for Salt Lake City was obtained from City Creek. This supply, however, was soon found to be inadequate and as the requirements of the City increased other nearby streams were drawn upon for additional water. In the meantime, however, the waters of other nearby streams had been appropriated and used for irrigation purposes.

In order that the City might obtain the mountain water for municipal purposes it was necessary to provide irrigation water from other sources. This was done by the construction of the Jordan & Salt Lake City Canal which diverted water from the Jordan River in the Jordan Narrows, and conveyed it along the foothills and into and through the city, connecting with City Creek, through which the excess, or tail water, was conveyed back to the Jordan River and finally into Great Salt Lake.

The construction of the Jordan & Salt Lake City Canal was commenced in 1882 and completed in 1883. The East Jordan Canal, in which Salt Lake City owns an interest, was built later. This parallels the Jordan & Salt Lake City Canal but is located at a higher elevation and obtains its water from the same source. Through these canals the irrigation water furnished by Salt Lake City is conveyed to the lands under cultivation.

The first exchange agreement was made with the owners of Parleys Creek water rights whose lands were located below the Jordan & Salt Lake City Canal. This agreement was made June 25, 1888. Later on additional agreements were made with the owners of the water rights of Big Cottonwood, Mill Creek and Little Cottonwood.

This report will deal with the Big Cottonwood Water.

MORSE DECREE - BIG COTTONWOOD CREEK

Suit commenced February 1st, 1907 by filing of complaint by the Progress Company.

On June 6th, 1908 the court rendered its decision as to the rights of the various parties to the use of water during the irrigation season, that is, the time from April 1st to October 1st, of each year.

On the 24th day of December 1913, the court rendered its final decision which included all rights to the use of water during the non-irrigation season, that is, from the first of October of each year to the first day of April following. The decree was finally issued under date of April 13th, 1914.

The rights to the use of all of the waters of Big Cottonwood Creek at and above the upper intake to the Hill Ditch, during the irrigation season, when the flow of the same does not exceed 351.5 sec. ft., as determined by measuring the water flowing into each of said several canals and ditches. The aggregate of this measurement shall be deemed the total flow of said creek. The water to which the Butler Ditch is entitled shall be measured to it at the point where the weir is now situated, about 2 miles below the intake thereof.

The rights are decreed in shares or sixtieths of the total flow and in proportion to the capacity of the various canals, as follows:

SURPLUS STAGE-IRRIGATION SEASON

<u>NAME OF CANAL</u>	<u>CAPACITY SECOND FEET</u>	<u>SHARES OR SIXTIETHS</u>
Butler	10	1.71
Brown & Sanford	50	8.52
Upper Canal	60	10.23
Upper Ellison	9	1.54
Newman	4	0.69
Tanner	60	10.23
Green	24	4.09
Walker	3	0.51
Farr and Harper	4	0.69
Lower Canal	30	5.12
Big Ditch	60	10.23
Hill	7	1.21
Lower Ellison	8	1.37
McGhie	10	1.71
Harper & Taylor	4	0.69
Severson	4	0.69
Bagley	3	0.52
Knudsen & Bagley	1	0.17
Knudsen	1/2	0.08

That when the total flow of the creek as above defined, does not exceed 120 sec. ft. then the following named ditches and canals, and the owners thereof, are decreed the right to the use of all the waters flowing in Big Cottonwood Creek to be divided in shares or sixtieths, as follows:

PRIMARY STAGE - IRRIGATION SEASON

<u>NAME OF CANAL</u>	<u>SHARES OR SIXTIETHS</u>
Butler	0.5
Brown & Sanford	3.6
Upper Canal	10.5
Upper Ellison	0.7
Newman	0.2
Tanner	13.21
Green	5.3
Walker	0.32
Farr and Harper	0.5
Lower Canal	5.8
Big Ditch	17.1
Hill Ditch	2.13
Bagley & Knudsen	0.04

That when the flow of the creek, above the upper intake to the Hill Ditch, during the non-irrigation season, is 50 sec. ft. or less, then all of said waters are decreed to the following named ditches in the following proportions:

NON-IRRIGATION SEASON

NAME OF CANAL OR DITCH

SIXTIETHS

Butler Ditch	0.67
Brown & Sanford Ditch	6.25
Upper Canal	9.63
Thomas S. Newman	0.04
Tanner Ditch	11.40
Green Ditch	7.30
Walker Ditch	1.20
Farr and Harper Ditch	0.43
Knudsen & Bagley Ditch	0.03
Big Ditch	15.75
Lower Canal	5.34
Hill Ditch	1.96

"That whenever, during said non-irrigation season, the quantity of water flowing in said Big Cottonwood Creek as aforesaid, exceeds 50 sec. ft., the right and title of said plaintiff, Progress Company, is hereby confirmed and quieted to have such excess of water flow down said stream into said Gordon Race, together with all the waters of said Big Cottonwood Creek flowing therein at a point immediately below the upper intake of the Hill Ditch, and the waters of Little Green River and Spring Creek, as provided in the second paragraph of this decree; the whole, however, not to exceed 150 sec. ft."

The second paragraph of the decree reads as follows:

"That the title of the plaintiff, the Progress Company, is hereby confirmed and quieted to the use of all of the waters of Big Cottonwood Creek flowing in said stream at a point immediately below the upper intake of the Hill Ditch; also, all the waters flowing in Little Green River for use at its power plant located at or near State Street, and for domestic, culinary and other useful purposes, including the use of all the waters of Spring Creek not in this decree awarded and quieted to other parties, to be used for power purposes at plaintiff's power plant known as the Miller Plant; the quantity of water hereby decreed to said plaintiff not to exceed one hundred and fifty (150) cubic feet per second of time."

"And it is further hereby DECREED that the title and right of said plaintiff and Rudolph Knudsen be and the same is hereby confirmed and quieted to divert from said Big Cottonwood Creek all the waters thereof, above the intake of their mill race at the Knudsen Plant, not otherwise in this decree quieted and awarded to other parties, not to exceed seventy-five (75) cubic feet per second of time, for power purposes at their power plant known as the Knudsen Plant, but such water shall, after use at said power plant, be returned to said Big Cottonwood Creek, undiminished in quantity, and unimpaired in quality; subject, however, to the right of Salt Lake City to divert the waters of said Big Ditch and Lower Canal into its conduit above the intake of said Knudsen race."

TABULATION OF DECREED WATER RIGHTS ON BIG COTTONWOOD CREEK
BETWEEN THE MOUTH OF THE CANYON AND THE UPPER INTAKE TO THE
HILL DITCH, SHOWING ALSO RIGHTS EXCHANGED TO SALT LAKE CITY
AND RIGHTS RESERVED BY THE VARIOUS DITCHES.

Irrigation Season	Surplus Stage		120 to 351.5 Sec.Ft.	
	Decreed Right In Sixtieths	Exchanged to City In Sixtieths	Reserved In Sec. Ft.	
Name of Ditch				
Butler	1.71	0		
Brown & Sanford	8.52	0		
Upper Canal	10.23	10.23	1.95	
Upper Ellison	1.54	1.54		
Newman	0.69	0		
Tanner	10.23	*9.45 - 9.50	2.591	
Green	4.09	4.09	0.80	
Walker	0.51	0.51	0.056	
Farr & Harper	0.69	0		
Lower Canal	5.12	5.12		
Big Ditch	10.23	10.23		
Hill Ditch	1.21	1.21		
Bagley & Knudsen	0.17	0.17	0.0014	
Thomas S. Newman	0	0		
Lower Ellison	1.37	0		
McGhie	1.71	0		
Harper & Taylor	0.69	0		
Severson	0.69	0		
Bagley	0.52	0		
Knudsen	0.08	0		

TOTALS	60.00	*42.55	-	+42.60	5.3984
* April 1st to July 1st					
+ July 1st to Oct. 1st					

The Brown and Sanford exchange agreement requires the city to furnish 10 sec. ft. of water to the Brown and Sanford Ditch when the stream flow is between 120 - 150 sec. ft. after May 15th.

TABULATION OF DECREED WATER RIGHTS ON BIG COTTONWOOD CREEK BETWEEN THE MOUTH OF THE CANYON AND THE UPPER INTAKE TO THE HILL DITCH, SHOWING ALSO RIGHTS EXCHANGED TO SALT LAKE CITY AND RIGHTS RESERVED BY THE VARIOUS DITCHES:

IRRIGATION SEASON	PRIMARY STAGE	0 to 120 Sec. ft.	
NAME OF DITCH	DECREED RIGHT IN SIXTIETHS	EXCHANGED TO CITY IN SIXTIETHS	RESERVED IN SEC. FT.
Butler	0.50	0	
Brown & Sanford	3.60	0	
Upper Canal	10.50	10.50	1.95
Upper Ellison	0.70	0.70	
Newman	0.30	0	
Tanner	13.21	*12.20-**12.27	2.591
Green	5.30	5.30	0.80
Walker	0.32	0.32	0.056
Farr & Harper	0.50	0	
Lower Canal	5.80	5.80	
Big Ditch	17.10	17.10	
Hill Ditch	2.13	2.13	
Bagley & Knudsen	0.04	0.04	0.0014
Thomas S. Newman	0	0	
Lower Ellison	0	0	
McGhie	0	0	
Harper & Taylor	0	0	
Severson	0	0	
Bagley	0	0	
Knudsen	0	0	
TOTALS	60.00	*54.09-**54.16	5.3984

* April 1st to July 1st

**July 1st to Oct. 1st

Note:

The Brown and Sanford exchange agreement requires the City after May 15th to furnish 10 sec. ft. of water to the Brown and Sanford Ditch when the Stream flow is between 100-120 Sec. ft. and 6 sec. ft. of water when the stream flow is between 60 - 100 sec. ft.

TABULATION OF DECREED WATER RIGHTS ON BIG COTTONWOOD CREEK BETWEEN THE MOUTH OF THE CANYON AND THE UPPER INTAKE TO THE HILL DITCH, SHOWING ALSO RIGHTS EXCHANGED TO SALT LAKE CITY AND RIGHTS RESERVED BY THE VARIOUS DITCHES.

NON-IRRIGATION SEASON-FLOW 0 to 50 SEC. FT.

<u>NAME OF DITCH</u>	<u>DECREED RIGHTS IN SIXTIETHS</u>	<u>EXCHANGED TO CITY IN SIXTIETHS</u>	<u>RESERVED IN SEC. FT.</u>
Butler	0.67	0	
Brown & Sanford [#]	6.25	0-6.25-0	
Upper Canal	9.63	9.63	1.083
Upper Ellison	0	0	
Newman	0	0	
Tanner	11.40	*10.59-10.53	1.438
Green	7.30	7.30	0.442
Walker	1.20	1.20	0.031
Farr & Harper	0.43	0	
Lower Canal	5.34	5.34	
Big Ditch	15.75	15.75	
Hill Ditch	1.96	1.96	
Bagley & Knudsen	0.03	0.03	0.0008
Thomas S. Newman	0.04	0	
Lower Ellison	0	0	
McGhie	0	0	
Harper & Taylor	0	0	
Severson	0	0	
Bagley	0	0	
Knudsen	0	0	
TOTALS	60.00	SEE NOTE	2.9948

[#] Brown & Sanford Share exchanged to Salt Lake City from November 1st of each year to March 15th following

* October 1st to January 1st + January 1st to April 1st

Note: City's share Oct. 1st to Nov. 1st 51.8 Sixtieths
 " " Nov. 1st to Jan. 1st 58.05 "
 " " Jan. 1st to March 15th 57.99 "
 " " Mar. 15th to Apr. 1st 51.74 "

*Between the mouth of the Canyon and the Upper Intake of the Hill Ditch

WATER RIGHTS ON BIG COTTONWOOD CREEK,* AS FIXED BY THE MORSE DECREE, APRIL 13, 1914:

NAME OF DITCH CO.	NON-IRRIG. SEASON		IRRIGATION SEASON			
	FLOW 0 TO 50 sec.		Primary Surplus			
	ft.		0 to 120		120 to 351.5	
			sec. ft.		sec. ft.	
	<u>Sixtieths</u>	<u>%</u>	<u>Sixtieths</u>	<u>%</u>	<u>Sixtieths</u>	<u>%</u>
Butler	0.67	1.117	0.50	0.833	1.71	2.85
Brown & Sanford	6.25	10.417	3.60	6.00	8.52	14.20
Upper Canal	9.63	16.05	10.50	17.50	10.23	17.05
Upper Ellison	0	0	0.70	1.167	1.54	2.567
Newman	0	0	0.30	0.50	0.69	1.15
Tanner	11.40	19.00	13.21	22.017	10.23	17.05
Green	7.30	12.167	5.30	8.833	4.09	6.817
Walker	1.20	2.00	0.32	0.533	0.51	0.85
Farr & Harper	0.43	0.717	0.50	0.833	0.69	1.15
Lower Canal	5.34	8.90	5.80	9.667	5.12	8.533
Big Ditch	15.75	26.25	17.10	28.59	10.23	17.05
Hill Ditch	1.96	3.267	2.13	3.55	1.21	2.017
Bagley & Knudsen	0.03	0.05	0.04	0.067	0.17	0.283
Thomas S. Newman	0.04	0.067	0	0	0	0
Lower Ellison	0	0	0	0	1.37	2.283
McGhie	0	0	0	0	1.71	2.85
Harper & Taylor	0	0	0	0	0.69	1.15
Severson	0	0	0	0	0.69	1.15
Bagley	0	0	0	0	0.52	0.867
Knudsen	0	0	0	0	0.08	0.133

Exchange agreements as noted below have been made by the City with the owners of Big Cottonwood water rights.

<u>Name of Ditch</u>	<u>Date Of Exchange Agreement</u>
Brown & Sanford	June 30, 1931
Upper Canal	Aug. 9, 1921
Upper Ellison	May 27, 1926
Tanner	Jan. 2, 1920
Green	Sept. 13, 1922
Walker	Nov. 17, 1921
Lower Canal	June 27, 1905
Big Ditch	June 27, 1905
Hill Ditch	June 28, 1905
Bagley & Knudsen	Oct. 3, 1924

*This agreement involved only the B & S rights from Nov. 1st to March 15th.

Definitions:

In the Morse Decree the old custom of expressing water rights in Big Cottonwood Creek in 60ths of the flow was adopted.

Irrigation Season is defined in the decree as the time from April 1st to October 1st of each year.

Non-Irrigation Season is defined as being the time from October 1st to April 1st of the following year.

Primary Rights consist of the flow of Big Cottonwood Creek when the total flow is 120 second feet or less.

Surplus Rights consist of rights, when the flow is in excess of 120 second feet, to a maximum of 351-1/2 sec.ft.

The only primary rights existing between the Butler Ditch and the Hill Ditch, both inclusive, during the irrigation season, with which Salt Lake City has not made exchange agreements for obtaining the use of said waters are as follows: Butler 0.5 sixtieths, Brown and Sanford 3.6 sixtieths, Newman 0.3 sixtieths and Farr and Harper 0.5 sixtieths.

DECREED RIGHTS OF BIG COTTONWOOD DITCHES FOR WHICH THE CITY HAS NOT EXCHANGED. RIGHTS ARE EXPRESSED IN SIXTIETHS OF TOTAL FLOW AS MEASURED IN THE DITCHES.

Name of Ditch	Shares					
	Non-Irrigation Season		Irrigation Season			
	60th	%	60ths	%	60th	%
Butler	0.67	1.117	0.50	0.833	1.71	2.85
*Brown & Sanford	6.25	10.417	3.60	6.00	8.52	14.20
Newman	0	0	0.30	0.50	0.69	1.15
Thomas S Newman	0.04	0.067	0	0	0	0
Lower Ellison	0	0	0	0	1.37	2.283
McGhie	0	0	0	0	1.71	2.85
Harper & Taylor	0	0	0	0	0.69	1.15
Severson	0	0	0	0	0.69	1.15
Bagley	0	0	0	0	0.52	0.867
Knudsen	0	0	0	0	0.08	0.133
Farr & Harper	0.43	0.717	0.50	0.833	0.69	1.15
TOTALS	7.39	12.32	4.90	8.17	16.67	27.78

*Exchanged to Salt Lake City from November 1st of each year to the following Marcy 15th.

† From November 1st each year to March 15th following totals mark (†) become 1.14 and 1.90 respectively.

The Brown & Sanford Irrigation Company Exchange Agreement With
Salt Lake City

The Brown & Sanford Irrigation Company diverts its water at the City weir. It has a non-irrigation right of 6.25/60.
primary right 3.6/60.
Surplus right 8.52/60.

Under the terms of the exchange agreement dated June 30, 1931, the City acquired the right to the use of the company's non-irrigation season water rights from November first to March 15th each year. In exchange for this water right the City paid the company \$35,000; and in addition paid the cost of engineering and inspection upon the construction of a culinary water system covering the Brown & Sanford territory. The additional cost to the City for engineering and inspection was \$3,042.99; making a total cash cost to the City of \$38,042.99. The Brown & Sanford Company paid the cost of construction of the culinary system, and agreed to deed it to the City upon its completion. This, however, has not been done up to date (Jan. 1935). The City agreed to furnish culinary water at the regular City rates, and in addition to furnish irrigation water as follows: Approximately 400 acre ft. the exact amount to vary with the flow of Big Cottonwood Creek as follows:

- 10 sec. ft. when the total flow of Big Cottonwood Creek, as provided in the Decree, is 150 - 100 sec. ft.
- 6 sec. ft. when the total flow is from 100 - 60 sec. ft.

and in addition, to pump 200 acre feet of additional water if the company furnishes it at the 60th South Pumping Plant; provided, however, that the City has unused pumping capacity, the company to pay its pro rate share of the pumping costs. The agreement provides that the City is not to furnish any irrigation water before May 15th.

The City shall maintain perpetually suitable measuring devices for the measurement of said water.

The City shall perpetually maintain in good condition the said culinary water system and shall operate the same at its own cost.

All service connections, including cost and maintenance of meters and service pipe shall be at the expense of parties requiring such connections.

The cost of installing and maintaining fire hydrants shall be borne by the company.

The Brown & Sanford territory is located at a high elevation. The only practical way for the City to supply the water it has agreed to furnish is to get it from Big Cottonwood Creek. The net result of the exchange, therefore, is that the City has exchanged summer water for winter water.

The City is not required to furnish irrigation water for land not now owned by stockholders of the company, nor for use on land not under the present ditches of the company.

Under application A-1059 the Brown & Sanford Irrigation Company applied for a change in point of diversion to the City's Conduit and a change of use from irrigation to domestic, culinary and irrigation purposes. This application lapsed October 20, 1931. The City has not made application for change of point of diversion and use of the Brown & Sanford Company's winter water.

Any future extensions to the culinary system are to be made at the expense of the company, and when made are to become the property of the City. The City is not obligated to make more than 2000 connections, one for each share of the present capitol stock of the company. Connections are to be made at the expense of the persons requiring them.

The Brown and Sanford Irrigation Company own three Lakes in what is known as Mill "B" South Fork. These lakes are named Lake Blanche #1, #2 and #3. The right to store water in those lakes was initialed Nov 5th, 1904, when this company filed application #214 for 140 acre feet storage. This application was approved Feb. 3rd, 1906 and proof of completion of works and beneficial use was made October 7th, 1910, but certificate #927 was not issued until April 27th, 1920. This certificate was issued for 140 acre feet, to be stored as follows: Lake Blanche, 70 acre feet, Lake Blanche #2, 24.95 acre feet, Lake Blanche #3, 45.05 acre feet.

On January 10th, 1911, the company filed 3 additional applications numbered 3720, 3721 and 3722 each application being made for 125 acre feet storage in Lake Blanche #1, #2 and #3 respectively. The priority of these filings was brought down to March 2nd, 1912 on account of a change being made and they were approved on March 8th, 1913. Extensions of time were granted from time to time until the legal 14 year period expired at which time the court granted an extension of time for four years or until March 1st, 1931 and again at this time the court extended the time until March 1st, 1935. On Oct. 21st, 1925, change application A-874 was filed which changed the 125 acre feet under application #3720 from Lake Blanche #2 to Lake Blanche #1, making 250 acre feet additional storage, to the 70 acre feet covered under certificate #979 for Lake Blanche #1. This change was approved April 24th, 1926. Proof of appropriation and of beneficial use was submitted February 26th, 1935 for applications #3721 and #3722 and application #3720 was allowed to lapse. In the proof of appropriation, filed with the State Engineer, the capacity of Lake Blanche #1 is given as 195 acre feet and of Lake Blanche #3 as 130.46 acre feet. The dam at #1 is claimed to have been raised 10 feet or to the 21 ft. contour, while at #3 the capacity is given at the 25th contour.

As it now stands, the proofs submitted on the three reservoirs show a total capacity of 350.41 acre feet divided as follows: #1 - 195 acre ft., #2 - 24.95 acre ft., #3 - 130.46 acre ft.

These reservoirs are located at an elevation of 9000 feet and at this elevation the run-off occurs later in the season than the main high water or surplus period as measured at the mouth of the canyon, with the result that if water is stored in these lakes, it must be deducted from some decreed right except in years of extremely heavy precipitation. This has been the custom in the past, that is to store water during the stage between 120 second feet and 351.5 second feet and the amount being held back as storage has been deducted from the Brown and Sanford right in their ditch. The capacity which has been used for these lakes, when full being 357 ac. ft.

The following table shows the storage of water in these lakes, during the past seven years, as reported by the court commissioner:

<u>YEAR</u>	<u>DATE OF STORAGE</u>	<u>AMOUNT STORED</u>	<u>STREAM FLOW VARIED FROM SECOND FEET</u>
*1928	May 15th to 19th	# 357 Acre Feet	264.8 to 270.6
1929	June 9th to 13th	# 357 " "	265.0 to 306.9
1930	May 13th to June 10th	# 346 " "	92.4 to 236.5
1931	May 13th to 18th	282 " "	154.4 to 213.0
1932	May 30th to June 15th	# 350 " "	157.2 to 323.4
1933	June 8th to 12th	# 357 " "	354.3 to 462.45
1934	May 16th to 26th	120 " "	61.8 to 87.9

*Considered an average year

#Reported full

The company filed application #A-1116 in the office of the State Engineer, which asked for the right to store 1000 acre feet of water in the reservoir owned by the company between April 1st and June 15th and the amount so stored would be relapsed later for irrigation purposes, this application was allowed to lapse on the 6th day of July 1930.

Upper Canal Irrigation Company's point of diversion is about 1.5 miles below the intake to the City's conduit. It has a non-irrigation season right of 9.63 sixtieths, a primary right of 10.5 sixtieths, and a surplus right of 10.23 sixtieths. By an agreement, dated August 9th, 1921, the City acquired the right to use all the Company's water except a culinary reserve of 1,260,000 gallons daily, (1.95 sec. ft.) during the irrigation season, and 700,000 gallons daily, (1.083 sec. ft.) during the non-irrigation season.

The City agrees to construct and perpetually maintain at its own expense, an efficient pipe line system for the company's exclusive use in delivering the water reserved for culinary purposes. This system was built by the City at a cost of \$59,248.16. Maintenance of the system shall be such that there will be no appreciable loss or waste of water and the pressure shall be maintained at 10 lbs. per sq. in. "and the City agrees that it will perpetually and uniformly divert and deliver, during a period from and including April 1st to Oct. 1st, and Oct. 1st to April 1st, of each year from Big Cottonwood Creek into said mains, for the use of the Company "the above described quantity of water," as a first and prior claim to the waters of Big Cottonwood Creek.

Location of Watermains Described in Agreement

All connections to the mains shall be made by the City on the Company's orders and at actual cost to the Company.

"The City agrees to pay and acknowledge itself liable to the Company and its stockholders for any damage which the Company as such, or its stockholders may sus-

tain by reason of the failure of the City to install, lay and maintain said pipe line and deliver to the Company the quantity of water to which the Company, under this agreement, is entitled, and to pay all costs, expenses of every kind incurred by the Company and its stockholders, including a reasonable attorney's fee, in the enforcement and maintenance of the rights of the Company and its stockholders under this agreement."

City may furnish water from other sources than Big Cottonwood provided it is pure.

Water in excess of that reserved shall be delivered to the Company on demand, provided that the City has any water in excess of its municipal needs and at the regular City water rates.

Company agrees to secure all necessary franchises and rights of way.

The company may terminate the agreement if the City fails to deliver the water as provided, for a period of six months, but the City shall be liable for all damages.

City agrees to preserve and protect the water rights of the Company, and agrees to pay all charges and assessments levied against said water and water rights incident to the control, distribution and maintenance of the waters of Big Cottonwood Creek.

The City agrees to deliver irrigation water as follows: During April, May, and June the same amount the Company's rights in the stream entitle it to, less culinary water reserved; during July 25 sec. ft.; during August 21 sec. ft.; during September 18 sec. ft.; and during the first 15 days of October 8 sec. ft.; said deliver of irrigation water to be made upon the Upper Canal system as at present constructed.

The City agrees at its own expense, "to install and at all times maintain, at the point or points of deliver of irrigation water to the Company, efficient and proper measuring devices."

The City is liable for damages caused by failure to deliver the water above described "including costs, attorney's fees and all other expenses incurred by the Company in securing the delivery of said water."

The City built the Upper Canal Pumping Plant, known as the 60th South Pumping Plant, in 1924. The water pumped is taken from the East Jordan Canal and raised approximately 200 feet and delivered to the Upper Canal, Upper Ellison and the Tanner Ditch systems to supply the irrigation water, which the City is required to furnish through the exchange agreement, for land lying above the City's Canals. The original plant consisted of a frame pump house and a 30 inch diameter continuous wood stave discharge line 7021 feet in length, with 2 centrifugal pumps of 16 and 10 second feet capacity. The cost of the original plant including pumps, pump house, pipe line, right of way power line and transformers, was \$84,186.66. In 1931, a third pump of 10 sec. ft. capacity was installed at a cost of \$5,407.03 and in 1932 the old pump house was abandoned and a new brick building

was built, raising the pumps out of the sump originally used, to avoid flooding the pumps and short circuiting the motors when a breakdown occurred. The cost of the new pump house and changing the pump locations was \$6,433.58. The total cost of the plant to date is \$96,027.27, exclusive of maintenance. The amount of water pumped each year varies, according to the length of period necessary to operate the pumps, from 1475 acre feet pumped in 1927 to 4463 acre feet pumped in 1924. The average amount pumped per year was 3053 acre feet.

The following table shows the cost of pumping water at this plant with the depreciation based upon the total cost of the plant less \$5,052.80, the cost of the original pump house and switch board, which have been replaced. \$96,027.27 less \$5,052.80 leaves \$90,974.47 as a capital investment.

TABLE SHOWING ITEMIZED COST OF PUMPING

ITEM	AVERAGE QUANTITY OF WATER PUMPED ACRE FEET PER YEAR	COST PER ACRE FOOT TOTAL COST COST	
Annunity that will amortize value of pumping plant in 20 years at 5%.....	3,053	\$2.39	\$7,300.02
Cost of power.....	3,053	2.52	7,684.60
Cost of Operation & Maintenance	3,053	0.60	1,834.22
TOTAL	3,053 Ac. Ft.	\$5.51	\$16,818.84

The agreement gives the City the right to enlarge the Upper Canal, at its own expense, and to transport certain of its water to Mill Creek through the enlarged canal, the City to pay its proportionate part of the cost of maintenance.

The City has not made application for change of point of diversion and use of the Upper Canal Company's water.

Upper Ellison

The Upper Ellison Ditch has no non-irrigation season right; it has a primary right of 0.7 sixtieths and a surplus right of 1.54 sixtieths during the irrigation season April 1st to October 1st. By an agreement, dated May 27th, 1926, the City acquired a right to the use of all the Upper Ellison water. The City built a pipe line, at a cost of \$3,600, and agreed to deliver culinary water at regular City rates, the stockholders to pay for connections. The maximum number of connections allowed is 192 - one for each share of stock. The City agreed to furnish irriga-

tion water during April, May and June in an amount equal to the Upper Ellison share in Big Cottonwood Creek. During July, August and September, 30% more than that share, amount to be determined by weekly measurements of the creek.

The irrigation water is to be delivered by the City at its expense at point of crossing of Upper Ellison Ditch by the Progress pipe line, station 59 53 Upper Canal Pumping Plant Line; and where the Upper Canal Pumping Plant Line crosses the Upper Ellison Ditch east of first crest at Station 48 70, or at the owners' expense at any other point requested south on the East Jordan Canal.

In case the city fails to deliver the water as provided for the owners may retake their water from the creek, and if the default continues for six months, all rights acquired by the city shall be forfeited.

The City agrees to defend, at its own cost all rights of the owners in Big Cottonwood Creek.

In application #A-930 Salt Lake City applied for change in point of diversion and use of 9 second feet of Upper Ellison water. This was approved February 10, 1927, certificate #4 issued 3-12-29.

Newman Ditch

The Newman Ditch has no non-irrigation season right. It has a primary right of 0.3 sixtieths and a surplus right of 0.69 sixtieths. The City has not exchanged for the Newman right, but in order to save seepage losses in the creek channel, it delivers water through the Green & Tanner culinary system to supply this right during low stages of the Big Cottonwood flow.

The following is taken from Mr. Beer's letter addressed to the Mayor which is dated January 18, 1933:

We have made a study of the Newman Ditch Company proposed agreement, also the water rights of the Newman Ditch Company, and I submit the following:

In a brief way -- The Newman Ditch Company Agreement provides that during the term of the proposed agreement the Ditch Company agrees to permit a change in the point of diversion of their water rights from the intake of their ditch to the intake of the City's Conduit, and the City agrees to deliver said water rights without loss through its conduit and pipe lines at a connection made to the pipe line leading from the Tanner Reservoir. The Ditch Company reserves the right to divert their water at the intake of their ditch during the surplus season, which averages about 2-1/2 months of each irrigation season. The change in point of diversion would thus be effective only about 3-1/2 months during each irrigation season.

In addition to delivering the Newman Ditch Company's water to them without loss, the agreement proposes that the City furnish the Company, through the Green Ditch pipe line or the Newman Ditch pipe line (as each individual stockholder in the Newman Ditch may desire) 36,000 gallons of Salt Lake City's water daily during the irrigation season and 24,000 gallons of Salt Lake City's water daily during the non-irrigation season. All costs effecting the change in point of diversion and the delivery of the water as above described is to be borne by the City.

In brief, this is a summary of the proposed agreement submitted by you to this office, and now attached to this report.

The water rights of the Newman Ditch Company under the Big Cottonwood court decree dated April 13, 1914, are as follows: When the flow of the stream does not exceed 351.5 sec. ft. the Newman Ditch Company's share is .69 of 1/60 of the flow; and when the flow of the stream does not exceed 120 sec. ft. the Ditch Company's share is .3 of 1/60 of the flow. These rights exist only during the irrigation season from April 1st to October 1st of each year. During the non-irrigation season, October 1st to April 1st of the following year, the Newman Ditch Company is not entitled to any water from Big Cottonwood Creek.

Attached hereto is a graph of Big Cottonwood Creek at the City weir, showing the monthly maximum and minimum flow in cubic feet per second for the years 1921 to 1931, inclusive. In connection with the above graph I have prepared another graph showing the decreed water rights of the Newman Ditch Company in Big Cottonwood Creek at different stages of flow. This graph shows the number of cubic feet per second, and also the number of gallons per 24 hours, that the Newman Ditch right is entitled to, with the stream flow varying from zero cu. ft. per sec. up to 351.5 cu. ft. per sec., the maximum decreed right of the Newman Ditch being 4.04 cu. ft. per sec. By taking the maximum or minimum flow of Big Cottonwood Creek from the graph and then using the Newman Ditch graph for that particular creek flow you can readily read off the flow that the Newman Ditch is entitled to in cubic feet per second or in gallons per 24 hour period. For example, in August, 1931, the minimum flow of Big Cottonwood Creek at the City weir (see graph) was 23 cu. ft. per sec., and the Newman graph shows that when the creek flows 23 cu. ft. per sec. the Newman Ditch right is .12 cu. ft. per sec. or 77,558 gallons per 24 hour period.

A study of the attached agreement, together with the decree and graphs, shows that the City, under the agreement, will be required to furnish the Newman Ditch Company 10,950,000 gallons of water annually from the City's water supply, and in addition deliver the Newman Ditch Company's water through the City mains in exchange for the privilege of changing the point of diversion of the Ditch Company's right for 3-1/2 months of each irrigation season. The months that the change of diversion would be effective are: July, August and September, and a few days during the latter part of June and the early part of April; and this would fluctuate with the stream flow of the creek as shown by attached Big Cottonwood Creek graph.

You will find that the water laws of the State of Utah, and the Court decisions, give the City of Salt Lake under its approved filing, the right to dry up the bed of Big Cottonwood Creek and divert the water of the Newman Ditch Company into its conduit, and deliver to the Newman Ditch Company the same quantity and quality of water at their headgates, and that the Newman Ditch Company, if this is done, would not be harmed in any way. Of course, Salt Lake City would not divert a part of the right and leave part in the streambed, and expect the Newman Ditch Company to stand for the loss in transit as this would be very unfair to the Newman Ditch Company. But, as stated above, we have a filing covering the drying up of the streambed, and if we so desire we can do so by delivering at the Newman Ditch Company's head-

by the Company and in a continuous flow during the months of April, May and June of each year, the quantity of water equal to that quantity to which the Company is or may be entitled as its proportionate share of the flow of the Big Cottonwood creek, (less the culinary water) and during the month of July of each year, thirty second feet, and during the month of August of each year, twenty-eight second feet, and during the month of September of each year, twenty-six second feet,

gate the amount of water they are entitled to under the decree. I am told by our engineers that this can be done very easily from the Tanner Reservoir.

With the above facts before us I would recommend that the City reject the attached agreement.

If, in the future, an agreement is entered into with the Newman Ditch Company I would suggest that the city agree to furnish water in quantity and quality equal to that turned over by the Newman Ditch Company, and that delivery of the same be made into the Newman Ditch pipe line at a point to be agreed upon, and that the City be given the right to take all of the Newman Ditch Company's water through the conduit if they so desire, or to turn it all down the creek.

If you wish to negotiate further with the Ditch Company I will be glad to furnish you with any information we have in this office.

Tanner Ditch Company

The Tanner Ditch has a non-irrigation season right of 11.4 sixtieths, a primary right of 13.21 sixtieths, and surplus right of 10.23 sixtieths. By an agreement, dated January 2nd, 1920, the City acquired the right to use all the water the Tanner Ditch owns, except a culinary reserve of 1,675,000 gallons daily, 2.591 sec. ft., from April 1st to September 30th, and 930,000 gallons daily 1.438 sec. ft., from October 1st to March 13th. The Company was to furnish franchises and rights of way necessary to the construction of a culinary system. "The place or point of diversion may be changed by the City at the cost, expense and risk of the City. The City may use the name of the company in such applications as may be necessary to effect said change."

Maintenance of pipe system shall be so handled that there will be no loss or waste. Location of pipe lines to be constructed is described in the agreement.

The City agreed to furnish irrigation water during April, May and June in an amount equal to the Company's share in Big Cottonwood Creek, less culinary water reserved, and during July 30 sec. ft., during August 28 sec. feet, during September 26 sec. ft., and during the first 15 days of October 15 sec. ft. Part of the Tanner Ditch territory 8/30 the. lies above the East Jordan Canal and cannot be supplied with Utah Lake water by gravity flow.

"The City shall furnish and deliver to the Company irrigation water, that is water suitable for irrigation purposes from any available source, the source being in the option of the City, and at such place or places as may be required by the Company and in a continuous flow during the months of April, May and June of each year, the quantity of water equal to that quantity to which the Company is or may be entitled as its proportionate share of the flow of the Big Cottonwood creek, (less the culinary water) and during the month of July of each year, thirty second feet, and during the month of August of each year, twenty-eight second feet, and during the month of September of each year, twenty-six second feet,

and during the first fifteen days of October of each year, fifteen second feet."

"Provided, that said water for said irrigation uses or purposes shall be so delivered, while it is required by the Company to be delivered upon the Big Cottonwood Tanner Ditch System as at present constructed and in such way and manner and in such way and manner and in such quantities, that each stockholder or user on the system shall be enabled under the distribution of said water to receive at all time his proportionate share of water to which he is entitled or to which he may be entitled by virtue of his shares or proportion in the Company or ditch system and under the system of distribution of said irrigation water whether distributed by the rotation system or otherwise."

"Provided, that if a change of place or places of delivery of said irrigation water from the place or places of delivery upon the present Big Cottonwood Tanner Ditch system shall be required by the Company of all or any portion of said irrigation water, then and in that event, any expenses or costs that may be incident to or arise because of such change shall be paid and sustained by the Company; provided further, that when the said change has been made upon the request of the Company, the place of delivery shall not be less convenient for the City or such as to increase in any manner the quantity of water to which the Company is or may be entitled or cost of delivery."

This exchange is further complicated by the fact that the number of shares in the Tanner Ditch right is not constant throughout the year; also some of the rights are not in the corporation and therefore are not included in the exchange. From January 1st to July 1st the number of shares is 1795, of which 137.75 shares, or 7.67% are not in the corporation. From July 1st to January 1st the number of shares is 1768, of which 125.75 shares, or 7.11% are not in the corporation.

The ownership of the shares not in the corporation is as follows:

	<u>Jan. 1 - July 1</u>	<u>July 1 to Jan. 1</u>
Vincent Shurtleff, wife and children, South Branch	41	29
Oscar W. Moyle, North Branch	22.75	22.75
Alice E. Moyle, North Branch	<u>74</u>	<u>74</u>
TOTALS	137.75	125.75

The City's share of the Tanner Ditch right thus becomes 92.33% in the first half of the year and 92.89% in the second half. As the irrigation water the City agreed to deliver during July, August, September and the first half of October was figured on the basis of the entire Tanner Ditch right, if the City delivers those specified flows to the shares in the corporation, it is exceeding the requirements of the contract.

The Shurtleff interests have a culinary right of 20,000 gallons per day, or 0.031 sec. ft.

It will be noted that the agreement required the Tanner Ditch Company

to secure all franchises and rights of way necessary to the construction of the culinary system.

P.S. Witcher deeded to the City land on which the reservoir appertaining to the culinary system is located, also right of way for the supply line to the reservoir. In consideration for the land and right of way obtained by Mr. Witcher the City agreed to install a connection to its conduit on the east boundary of his property, build a pipe line with a capacity of 75 gallons per minute, and to furnish water for culinary and garden use for 53.75 acres of land at regular meter rates. The City then deeded the above mentioned property to the Company. The entire culinary system is located on property and under franchises belonging to the Company. Furthermore, the exchange agreement provides that if the City forfeits the contract, the Company shall have the right to carry its culinary water through the City's conduit to the intake of the "mains". The culinary system belongs to the Company, and the only interest retained by the City is the right of perpetual maintenance and operation at the expense of the City.

If the City shall default in the deliver of either culinary or irrigation water for 24 hours, then, the company may retake the Big Cottonwood water and the City agrees to pay all costs, expenses, and damages, including crop damages and attorneys fees and if said default shall continue for a period of six months, then all rights acquired by the City under this contract shall be forfeited and any right acquired by the City under this contract shall cease and terminate and the company shall be restored to all the rights which it had before contract was made and the company shall not be liable for any damage resulting from the retaking of said water.

February 13, 1920, Salt Lake City filed application #A-534 for change of point of diversion and use of 65.93 sec. ft. of Tanner Ditch Company water. This was granted September 3, 1920.

Green Ditch

The Green Ditch has a non-irrigation season right of 7.3 sixtieths, a primary right of 5.3 sixtieths, and a surplus right of 4.09 sixtieths. The water right of the Green Ditch is divided into 573 shares or acres. By an agreement, dated September 13th, 1922, with part of the owners and by subsequent agreements with all the remaining owners except D. F. Harding or E. M. West owning 1/2 acre, and Alice E. Moyle or James R. Moyle, owning 12 acres, the City has acquired the right to the use of Green Ditch water pertaining to 560.5 acres, or 97.8% of the total Green Ditch water, on the following terms: the signers reserved for culinary purposes 500 gallons per acre per day in the non-irrigation season and 900 gallons per acre per day in the irrigation season. Figured on the basis of 573 acres the reserved water amounts to 286,500 gallons per day, or 0.442 sec. ft. during the non-irrigation season, and 515,700 gallons per day, or 0.800 sec. ft., during the irrigation season. The City constructed a culinary pipe system, at a cost of \$44,713.97, and agreed to operate and maintain it and perpetually to deliver the culinary water reserved to each of the water owners without cost to them.

The agreement names the streets upon which the pipe lines are to be constructed and provides that the City "shall make, pay for and maintain the necessary connections to the mains, up to the property lines, on either side of the street, for the present residents, and shall deliver and furnish, free of charge, to each of the owners, as their interests may appear," 35 linear feet of one inch galvanized water pipe for each acre of land owned under the Green Ditch; that the City shall maintain a pressure of 30 pounds per square inch at points of delivery; that it shall, at its own expense, install proper measuring devices at the points of use for each private connection and that any water owner, his successors and assigns, shall have the right to fuse the waters of Salt Lake City, thru said pipe line, in excess of the quantity reserved by paying for such excess at regular City rates.

The City agrees to pay all charges and assessments made against the Green Ditch, for the control, distribution and maintenance of the waters of Big Cottonwood Creek.

The City agreed to furnish irrigation water as follows: during April 8 sec. ft.; during May 14 sec. ft.; during June 19 sec. ft.; during July 16 sec. ft.; during August 12 sec. ft.; during September 10 sec. ft.; and during the first 15 days of October 6 sec. ft. "Provided, however, that if any of the owners of said water in the Green Ditch do not enter into this agreement, then Salt Lake City shall deliver to the parties owning waters in the Green Ditch who are parties to this agreement such proportions of said water in this paragraph set forth as their combined acreage under this agreement shall be to the total acreage of 573 acres." (The contract provides that, by paying any additional expense incurred, the owners can require the City to deliver their water to them at points other than in the Green Ditch.)

One of the subsequent agreements, that signed by G. R. Walker, Chas. A. Walker, and Mrs. N. A. Cheesman, dated August 21st, 1924, representing a total ownership of 84 acres, provides that the City shall furnish to the signers "irrigation water that is as clear and free from turbidity as Big Cottonwood Creek water; to be obtained from Big Cottonwood Creek or by pumping from sumps; provided, however, that the water table is not to be lowered to a point detrimental to trees and shrubs. The amount of clear water to be furnished under this agreement is the proportionate part of the amounts shown in the preceding paragraph that 84 acres is entitled to. The amounts are as follows: during April 1.17 sec. ft.; during May 2.05 sec. ft.; during June 2.78 sec. ft.; during July 2.34 sec. ft. during August 1.76 sec. ft.; during September 1.46 sec. ft.; and during the first 15 days of October 0.88 sec. ft.

In 1934 the City built a pipe line from Knudsens corner to a point just below the intake to the Green and Walker Ditches. By means of this connection water can be delivered to the intake of these ditches thru the Tanner exchange pipe line from the Big Cottonwood Conduit or to the Green Ditch only. If this pipe line was continued to the point where the Walker-Cheesman interests divert their water from the Green Ditch then the necessity of delivering clear water to other lands under the Green Ditch and lying above the East Jordan Canal, amounting to 65 acres, would be obviated. This arrangement would also eliminate the necessity of delivering clear water to the Walker and the Bagley & Knudsen Ditches (as has been done in

the past, due to the fact that clear water had to be delivered to the Walker-Cheesman lands) and thus limit the quantity of clear water delivered for irrigation purposes to that actually required under the Walker - Cheesman Agreement.

The Walker Cheesman Agreement is peculiarly unfortunate for the City for the following reasons: In the Green Ditch exchange, the City guaranteed certain flows of irrigation water in each month and fraction thereof from April 1st to October 15th. Those flows were so set that the amount of water delivered each year would equal the average amount accruing to the Green Ditch share yearly, based on a ten year average and the entire year's flow, less culinary water reserved. Furthermore, the amount to be delivered during the months of high runn-off is relatively small, and that to be delivered during the months when the creek is in its lower stages is relatively large. As the land included in this agreement must be given its proportionate part of the guaranteed flow, amounting to 237 million gallons each season, and so long as Big Cottonwood Creek is the only source of clear water, the net result is that for several months during the lower stage of the stream, in a dry year, when water is of the greatest value to the City, the City actually loses culinary water by the Green Ditch exchange.

TABULATED ANALYSIS OF THE GREEN DITCH EXCHANGE

QUANTITIES IN SECOND FT.

Month	Creek Water Reserved	Clear Water for irr.	Total Clear water	Irr. Water other Sources	Total to Complete Exchange	Total Green Ditch share in 1931	Average Green on Ditch share 1928 to 1932
April	0.8	1.17	1.97	6.83	8.80	5.41	6.30
May	0.8	2.05	2.85	11.95	14.80	10.12	14.76
June	0.8	2.78	3.58	16.22	19.80	5.86	12.47
July	0.8	2.34	3.14	13.66	16.80	2.47	5.33
Aug.	0.8	1.76	2.56	10.24	12.80	1.96	3.34
Sept.	0.8	1.46	2.26	8.54	10.80	1.90	3.09
Oct. 15	0.442	0.88	1.322	5.12	6.542	2.63	4.29

The above figures are based on the total Green Ditch rights; whereas there are 12 1/2 acres, out of a total of 573 acres, that have not been signed up under the agreement. Twelve acres, of the above 12 1/2 acres, belong to Alic E. or James H. Moyle and are located below the East Jordan Canal. This land has received and used irrigation water on the same basis as other Green Ditch lands up to the present time, March 1935. No culinary water has been supplied.

Salt Lake City made application No. A 535, on February 13, 1920, for change in point of diversion and nature of use of 26.37 sec. ft. of Green Ditch water, which is more than the decreed rights of the Green Ditch at any stage of the decreed flow of the creek. These changes in point of diversion should be so made that any required quantity may be diverted thru the conduit and the remainder diverted at the original point of diversion. This application was approved 9-3-20.

Walker Ditch

The Walker Ditch has a non-irrigation season right of 1.20 sixtieths, a primary right of 0.32 sixtieths, and a surplus right of 0.51 sixtieths. In an agreement, dated November 17th, 1921, Angelena A. Walker, S. S. Walker Estate Co., Inc., and Joseph H. Graham, owners of the Walker Ditch, transferred to Salt Lake City their right to the use of Walker Ditch water, except a culinary reserve of 20,000 gallons daily, 0.031 sec. ft., in the non-irrigation season, and 36,000 gallons daily, 0.056 sec. ft., in the irrigation season.

The agreement requires the City to lay and maintain watermains and to deliver the water reserved, or other equally suitable water to the individual Walker Ditch stockholders perpetually, at the expense of the City. The City agrees to make four connections (of not to exceed 16 feet in length) and to install and maintain four meters at its own expense, and additional meters or connections required shall be paid for by the owners.

The stockholders have the right to use water in excess of that reserved, which will be paid for at regular City rates.

The City agrees to pay all charges against the Walker Ditch for control, maintenance and distribution of Big Cottonwood water.

The City agrees to perpetually furnish and deliver at the head of the Walker Ditch irrigation water as follows: during April, May and June a flow equal to the present share of the Walker Ditch in Big Cottonwood Creek, during July 1.42 sec. ft., during August 1 sec ft., during September 0.9 sec. ft. and during the first 15 days of October 0.5 sec. ft.

In the past all of this water has been supplied from Cottonwood Creek due to the fact that clear water must be supplied to the Walker and Cheeseman interest.

In 1934 the City constructed a pipe line from the Green and Tanner System to the head of the Green and Walker Ditches, which makes possible the furnishing of clear water to the Green Ditch only, and water from the 60th South Pumping Plant could be released into the creek for delivery to the Knudsen - Bagley and Walker Ditches.

No application has been made for change of point of diversion and use of Walker Ditch Water.

Farr & Harper Ditch

The Farr & Harper Ditch is a small Ditch, taking out of Big Cottonwood Creek about one-half mile below the Green Ditch intake. It has a non-irrigation season right of 0.43 sixtieths, a primary right of 0.5 sixtieths, and a surplus right of 0.69 sixtieths. The City has no exchange agreement with this ditch, which usually is supplied by seepage into the creek below the Green Ditch intake. In case of a deficiency of seepage water, the City must arrange to supply water to this right.

Lower Canal Company

The Lower Canal Company has a non-irrigation season right of 5.34 sixtieths, a primary right of 5.8 sixtieths, and a surplus right of 5.12 sixtieths. By an exchange agreement dated June 27th, 1905, the Company transferred to Salt Lake City all its rights, except one sixtieth of the flow of Big Cottonwood Creek, as measured on October 1st, from October 1st to April 1st. Ample water to supply the one-sixtieth reserve arises in the bed of Big Cottonwood Creek above the Lower Canal intake.

The City paid a bonus of \$3,000 and, according to the terms of the original agreement, the City was to supply to the Company an amount of water equal to $31/240$ of the flow of Big Cottonwood Creek, as measured at the mouth of the canyon, but never to exceed 20 sec. ft. during the irrigation season, April 1st to October 1st, and one-sixtieth of the flow of the stream (must be Big Cottonwood water) from October 1st to April 1st, the flow to be determined by measurements made on the 1st and the 15th of each month from April 1st to October 1st, each measurement to govern until the next is made. The irrigation water is to be delivered at the head of the Lower Canal and at the J. & S. L. C. Canal crossings at Mill Creek and 14th South Street (now 33 South)

By reason of a verbal understanding had in 1920, but not executed until March 17th, 1932, the City is relieved of responsibility in the matter of delivering the one sixtieth reserved during the winter season, but in consideration therefore the City guarantees to deliver not less than 10 sec. ft. of water from July 1st to September 15th and not less than 6 sec. ft. from September 15th to October 1st.

This means that whenever the total flow of the creek, measured as determined at the mouth of the canyon, is reduced to 77.42 sec. ft., then the City begins to furnish water additional to that required under the original agreement with the Lower Canal Company and that whenever the total flow of the creek is reduced to 30.0 sec. ft. between July 1st and Sept. 15th, then the City is required to furnish 6.12 sec. ft. additional to that required under the original agreement.

No application has been made for change of point of diversion and use of the Lower Canal Company's water.

Big Ditch Irrigation Company

The Big Ditch Company has a non-irrigation season right of 15.75 sixtieths, a primary right of 17.1 sixtieths, and a surplus right of 10.23 sixtieths. By an exchange agreement, dated June 27th, 1905, the Company transferred all its rights to Salt Lake City. The City paid a bonus of \$25,000 and agreed to deliver water to the Company during the irrigation season, April 1st to October 1st, in an amount equal to $1/230$ of the flow of Big Cottonwood Creek, the flow to be determined by measurements made on the 1st and 15th of each month from April 1st to October 1st, each measurement to govern until the next is made, but the water required to be delivered is never to exceed 35 sec. ft. The City also agreed to deliver water during the non-irrigation season, October 1st to April 1st, equal to $1/80$ of the flow of Big Cottonwood Creek, as measured on October 1st. The City may furnish water from any source it desires; actually the non-irrigation season water is supplied by a siphon into the creek above the Big Ditch intake.

No application for change of point of diversion and use of the Big Ditch Irrigation Company's water has been made.

HILL DITCH

The Hill Ditch has a non-irrigation season right of 1.96 sixtieths, a primary right of 2.13 sixtieths, and a surplus right of 1.21 sixtieths. By an agreement dated June 28th, 1905, and an agreement with William Boam and wife in 1906, the Hill Ditch transferred all its rights, except 20 acres belonging to B. B. Bitner, to Salt Lake City. The City paid a bonus of \$3,545 and agreed to deliver, from April 1st to October 1st, at present point of diversion of the Hill Ditch, water equal to 7/150 of the flow of Big Cottonwood Creek, the flow to be determined by measurement made on the 1st and 15th of each month from April 1st to October 1st, each measurement to govern until the next is made.

As the Hill Ditch is supplied by seepage water on entering Big Cottonwood Creek far below the intake to the City's Conduit, this exchange appears to be of no value to the City. Furthermore, the flow the City is required to furnish is one-third greater than the Hill Ditch share in Big Cottonwood when the stream is at primary stage. If the seepage should at any time be insufficient to supply this greater flow, the exchange may be of considerable disadvantage to the city.

No application has been made for change of point of diversion and use of the Hill Ditch water.

The Hill Ditch has two intakes (the upper intake and the lower intake). The upper intake is located a short distance west of Highland Drive and south of 49th South, the lower intake being located about 1/4 mile east of 13th East and south of 48th South. There are several springs feeding Big Cottonwood Creek between those two intakes. Under the decree, the water issuing from springs and accretions below the upper intake was awarded to the Progress Company as part of their power right. On February 18, 1927, the Hill Ditch Irrigation Company filed application #10,118 for 5.0 second feet of water from Big Cottonwood Creek to be diverted at the lower intake of their ditch, this application was advertised on July 23, 1927 without protest and was approved by the State Engineer October 15th, 1927. Proof of appropriation was presented December 31, 1930 and certificate #1969 was issued January 14th, 1931 and conveyed the right to the use of 3.0 second feet. This water being a part of the Progress Company's decreed right, was conveyed to the City in the transfer of May 9th, 1931 by the Progress Company, even though they had permitted application #10118 to be perfected without protest by their company.

Bagley & Knudsen Ditch

The Bagley & Knudson Ditch has a non-irrigation season right of 0.08 sixtieths, a primary right of 0.04 sixtieths, and a surplus right of 0.17 sixtieths. By an agreement, dated October 3rd, 1924, the owners of the ditch transferred all their rights, consisting of all of the decreed rights of the Bagley & Knudsen Ditch, to the City and agreed to deliver their water at the intake of the City's Conduit at the mouth of the canyon and to protect the City against interference.

The City agreed to deliver, at its own cost, culinary water in the 60th South pipe line for use of the owners, and to pay for one service connection. The quantity to be furnished during the irrigation season is 900 gallons daily, during the non-irrigation season, 500 gallons daily. The City further agreed to furnish irrigation water for use on land under the present ditch as follows: "during April, May and June and part of July, or until the creek flow recedes to the primary stage, of each year, a quantity of water equal to the share of said ditch in the flow of Big Cottonwood Creek, during the remainder of July, or from the date that the creek recedes to primary stage, and during August and September 50% more than the share of said ditch."

City to construct and perpetually maintain at the point of delivery of the irrigation water, about 300 feet below the head of the ditch a suitable measuring device.

City agrees to pay all charges and assessments levied against the company for control, distribution and maintenance of Big Cottonwood Creek and to defend all suits at law or other proceedings involving the title or the right to the use of the water.

Owners agree to deliver the water at the intake to the City's Conduit.

All of this water has, in the past, been supplied from Big Cottonwood Creek, due to the fact that clear water must be supplied to the Walker and Cheesman interest.

This clear water can now be furnished to the Green Ditch by means of a pipe line constructed in 1934 from the Green and Tanner system to the head of the Green and Walker Ditches and Utah Lake water can be pumped through the 60th South Pumping Plant for delivery into the creek from where it can be diverted into the Bagley and Knudsen Ditch. No application for change of point of diversion and use of the Bagley & Knudsen Ditch water has been made.

Thomas S. Newman Ditch

The Thomas S. Newman Ditch has a non-irrigation season right of 0.04 sixtieths, applied from seepage, but no irrigation season right. The City has no exchange agreement with this ditch.

Miscellaneous rights affecting the section of the Big Cottonwood System Between the intake to the City's conduit and the Hill Ditch

Mrs. Ella Thomas Park

The rights claimed by Mrs. Park consisted of application #4149 and #4784 and a well in close proximity to Big Cottonwood Creek.

Application #4149, filed August 1st, 1911 sought to appropriate one second foot of Big Cottonwood Creek water. Proof of appropriation was made May 25, 1914 and certificate #173 was issued by the State Engineer June 23rd, 1915. The certificate of one second foot of water when available from April 1st to September

30th for irrigation on two acres of land, and in addition 1/80 of a second foot for culinary use during the entire year. The amount of irrigation water allowed was three acre feet per acre per year, or a total of six acre feet per year. As the court decree of 1914, rendered while this appropriation was pending, otherwise divided the Big Cottonwood Creek water up to a flow of 351.5 sec. ft., no water was available under application #4149 except when the stream flow was greater than 351.5 second feet. As the flow exceeds that rate for such short periods of time, some years not reaching it at all, this right would seem to have been of no real value. The allowing of a culinary right of 1/80 of a second foot for the entire year seems to have been in direct conflict with the court decree of the previous year.

Application #4784, filed July 23, 1912, sought to appropriate two tenths of a second foot of water from the Maxfield Tunnel, the water to be used for irrigation, domestic, and culinary use on the two acres of land described in application #4149 and on an additional 4.26 acres. Proof of application was made December 22nd, 1913, and a certificate of appropriation #174 was issued by the the State Engineer, June 23rd, 1915. Certificate #174 allowed the use of two tenths of a second foot whenever available from April 1st to September 30th inclusive of each year and an additional 1/40 of a second foot for culinary use the entire year. The amount of irrigation water allowed in certificate #174 was limited to three acre feet per acre per year for 6.26 acres, including the two acres described in certificate #173. The total amount of irrigation water allowed under application #4149 and #4784 thus is 18.78 acre feet, available only when the stream flow is in excess of 351.5 second feet. The combined culinary rights amount to 3/80 of a second foot, or 24,240 gallons per day. This was an unreasonably excessive culinary allowance, moreover it was in direct conflict with the court decree.

In addition to the above irrigation and culinary water, the Parks maintained a well from which they state that they pumped during the summer months 42 gallons per minute not less than eight hours per day, making 20,160 gallons per day, for lawn and garden sprinkling, and 12.5 gallons per minute for an average of three hours daily, making 2250 gallons per day, for domestic and culinary use.

If we grant the validity of Mrs. Park's filings, the real essence of her claim is contained in the following paragraphs in a letter written, March 15, 1927, by Boyd Park, who was representing Mrs. Park in the matter:

"Mrs. Park has been in possession of and has put to beneficial use water in the following amounts:"

"April 1st to September 30th of each year since 1911, out of the waters of Big Cottonwood Creek, not less than 10 acre feet, and there has been pumped and used from the well for lawn sprinkling and garden use, and domestic and culinary use, not less than 12 acre feet."

"As the City did not acquire title to the well in the agreement subsequently made with Mrs. Park, the item of consequence in the paragraph quoted is the 18 acre feet of Big Cottonwood water claimed. Furthermore it is evident that the right to 3/80 of a second foot of water for culinary use had not been maintained:

the use of so much culinary water, pumped into a tank, working at 45 to 60 pounds pressure, precludes all probability that Mrs. Park was using water from the stream for culinary purposes.

By an agreement dated December 15th, 1927, Mrs. Park transferred to Salt Lake City all rights claimed under applications #4149 and #4784. In consideration therefore, the City conveyed to her four shares of Green Ditch stock, cost \$150 per share, constructed a pipe line, and agreed to deliver the culinary and irrigation water to which the shares of Green Ditch stock she now owns or may hereafter acquire shall entitle her. Water suitable for irrigation purposes is to be diverted from the Big Cottonwood Channel, through Mrs. Parks present diversion works, in a continuous flow during the irrigation season as specified in the Green Ditch agreement.

The four shares of Green Ditch-stock conveyed by the City to Mrs. Park entitle her to four acre feet of culinary water and 35 acre feet of irrigation water each year. In return the City acquired a right to 18 acre feet of water, as claimed by Mrs. Park, or 18.78 acre feet as allowed by the State Engineer. Furthermore, as the water acquired is legally available only when the Big Cottonwood Creek flow is in excess of 351.5 second feet, it is of no present value to the City.

Since other agreements compel the City to supply clear water in the vicinity of Mrs. Parks property, it is impracticable to furnish canal water to her for irrigation use. The net result of the deal, therefore, is that the City acquired nothing of value and must lose 35 acre feet of Big Cottonwood water each year.

The agreement between the City and Mrs. Park authorizes the City to make application either in its or Mrs. Parks name for change in place of diversion. No such application has been made, and since the City acquired nothing, there seems to be no reason for doing so.

Francis McDonald

By an agreement, dated July 29th, 1907, the City acquired from Francis McDonald his application #192, approved by the State Engineer March 14th, 1907, for 50 sec. ft. of Big Cottonwood water from April 15th to July 15th each year. The agreement provides that if the City abandons the use of said water, the right shall revert to McDonald.

The City agreed to provide, on or before the 1st of November, 1907, eight openings not less than 8 inches in diameter in its Big Cottonwood Conduit between Hughes' Canyon and Neff's Canyon. The City, however, was not obligated to deliver any water unless some part of the water acquired by it under the said appropriation is flowing in its conduit, and then only such quantity as it shall determine the City's determination and designation to be final.

As the waters of Big Cottonwood are decreed to other rights up to a flow of 351.5 sec. ft., it seems improbable that McDonald's application ever was of any value. On the other hand, the City retained such complete freedom of action in the discharge of any obligations it might have incurred by the agreement that its interests were not necessarily damaged in any way. A letter from the State Engin-

eer, dated March 2nd, 1920, states that this application has lapsed.

Appropriation by Salt Lake City

October 21st, 1908, Salt Lake City made application for 48.8 sec. ft. of surplus water in the non-irrigation season. This right was confirmed by court decree April 13th, 1914. The Big Cottonwood flow in the non-irrigation season is otherwise decreed up to a flow of 50 sec. ft., with a surplus right to the Progress Company up to 150 sec. ft. from this and other sources. The Progress Company's rights were purchased by the City in 1931 for \$30,000.

Old Mill Tavern Lease

August 6th, 1927, the City leased to the Old Mill Tavern not more than one sec. ft. of water, to be diverted into the old channel through the old Mill, and returned to the creek unimpaired in quality and quantity. The City is to receive five dollars (\$5.00) per day when the water is diverted. The lease is revocable at any time.

Knudsen Power Right

Rudolph Knudsen and Charles Bagley originated a power right on Big Cottonwood Creek in 1875, by establishing what was known as the "Big Cottonwood Roller Mill," located about 900 feet west and immediately north of "Knudsen Corner," with the head of the ditch below the Tanner Ditch headworks. This power right was purchased by the City, after condemnation proceedings, for \$30,000. The appropriation of \$30,000 was made January 14th, 1907.

Knudsen and Progress Company Power Right

In 1900 Rudolph Knudsen posted notices of appropriation, and recorded the same, of certain waters of Big Cottonwood Creek, to be used for power purposes, which water would be returned to the stream above the Tanner Ditch. The appropriation notices were filed in 1900, a short time after the City Engineer has submitted a report on Big Cottonwood Creek as an additional source of supply for the City. When the proposed scheme was dropped by the City, Knudsen apparently dropped his power right. When the City revived its Big Cottonwood Project in 1905, Knudsen revived his power rights, and in 1906, built a power house jointly with the Progress Company. Salt Lake City had made filings on the waters above this site for power purposes, but let their filings lapse. By the Morse decree, of April 13th, 1914, the Progress Company and Rudolph Knudsen were decreed all the waters of Big Cottonwood Creek above the intake of their Mill Race, not otherwise decreed to other parties, but not to exceed 75 cubic feet per second, to be used for power purposes at the Knudsen Plant, the water to be returned to the creek undiminished in quantity and unimpaired in quality, subject, however, to the right of Salt Lake City to divert the waters of the Big Ditch and the Lower Canal into its conduit. On July 30th, 1923, Salt Lake City purchased from the Progress Company all their power and water rights below the intake of the Big Cottonwood Conduit and above the

Hill Ditch, including the Lower Knudsen right, or Knudsen's New Power Right and also including the Paper Mill filing #2692. It was also agreed that the pending suit against the City be dismissed and that the Progress Company should retain the Gordon Power Plant and the Miller Power Right as well as other rights below the Hill Ditch.

The City paid \$33,500 for the rights aforementioned, \$8,500 cash, acknowledged at the time of execution of warranty deed, and the balance in three yearly installments, the last of which was paid July 15th, 1926.

WARRANTY DEED

THE PROGRESS COMPANY, a corporation of Utah, Grantor, hereby conveys and warrants unto SALT LAKE CITY, A municipal corporation of the STATE OF UTAH, Grantee, for and in consideration of the sum of THIRTY THREE THOUSAND FIVE HUNDRED DOLLARS, payable as follows, to-wit: Eight Thousand Five Hundred Dollars (\$8,500) cash, receipt of which is hereby acknowledged; Eight Thousand Dollars (\$8,000), payable on the 15th day of July 1924; Eight Thousand Dollars (\$8,000), payable on the 15th day of July 1925, and Nine Thousand Dollars (\$9,000), payable on the 15th day of July 1926; together with interest on the balance unpaid at the rate of six per cent per annum, payable annually; said deferred payments evidenced by negotiable notes of grantee of even date herewith; all of the following described water and water rights situated in Salt Lake County, State of Utah, to-wit:

All of the water rights and power rights owned by the grantor in Big Cottonwood Creek below the point of grantee's conduit diversion and above the Hill Ditch diversion, including therein and particularly meaning thereby the Lower Knudsen Power right, sometimes called "Knudsen new water power right", which is referred to and confirmed and quieted unto the Progress Company and Rudolph Knudsen in the decree of the Third Judicial District Court of Salt Lake County, State of Utah, of date April 13, 1914, in case of the Progress Company, a corporation, et al., plaintiffs, vs. Salt Lake City, et al, defendants, which said decree was affirmed by the Supreme Court of the State of Utah in the same case; also its Paper Mill filing, otherwise known as Upper Knudsen filing, the same being File No. 2692, in the office of the State Engineer of the State of Utah, and regarding which there is now a suit pending in the Third Judicial District Court of the State of Utah, in and for Salt Lake County, entitled The Progress Company vs. Salt Lake City, which said case is to be dismissed and all the rights and interests of the grantor in and to said power filing are hereby vested in the grantee; also all surplus waters in Big Cottonwood Creek claimed, owned or used by the grantor;

Excepting and reserving, however, unto the grantor all water and water rights owned, possessed and used by the grantor now or hereafter, whether in or from Big Cottonwood Creek or elsewhere, which cannot be diverted, used or interfered with by the grantee, at the city's point of diversion where it takes the water of Big Cottonwood Creek into its conduit near the mouth of Big Cottonwood Canyon.

And the grantor, its successors and assigns, hereby waive any right of action or claim for damages against the grantee now or hereafter by reason of grantor's ownership of the Gordon power right and the Miller power rights and all other water or power rights below the Hill Ditch diversion because of the taking into its pipe system of any or all of the waters of Big Cottonwood Creek by grantee.

Said grantor specifically consents that the grantee may take all the waters of said Big Cottonwood Creek into its conduit, discharged of any and all liability or claim for damages by reason of said taking.

IN WITNESS WHEREOF, said grantor has caused this deed to be executed by its President and countersigned by its Secretary and its corporate seal to be hereunto affixed this 30th day of July 1923.

THE PROGRESS COMPANY

BY /s/ John P. Cahoon
President

/s/ Chester C. Cahoon
Secretary

Seal

Stamps \$33.50

STATE OF UTAH :
SS
COUNTY OF SALT LAKE :
.....

On the 30th day of July 1923 personally appeared before me John P. Cahoon and Chester C. Cahoon who did say that they are, respectively, the President and Secretary of the Progress Company, a corporation, and that the above instrument was executed by them on behalf of said corporation by authority of a resolution passed by the Board of Directors on the day of 1923 and the aforesaid John P. Cahoon and Chester C. Cahoon acknowledged to me that said corporation executed the same.

Seal

/s/ Pearl E. Jack
Notary Public, Residing at
Salt Lake City, Utah

RIGHTS BELOW HILL DITCH UPPER INTAKE

PROGRESS COMPANY

In the decree of April 13th, 1914, the Progress Company was awarded all the water flowing in Big Cottonwood Creek at a point immediately below the upper intake of the Hill Ditch, also all the water of Little Green River, for use at its State Street power plant and for domestic and culinary use and for other useful purposes; also all the water of Spring Creek, not otherwise awarded for use in its Miller Power Plant, the total flow decreed to the Progress Company not to exceed 150 sec. ft.

The decree awarded to the Progress Company in the non-irrigation season all water in excess of 50 second feet flowing in Big Cottonwood Creek above the Big Ditch Dam, limited, however, by the provision that the flow so awarded together with the waters mentioned in the preceding paragraph shall not exceed 150 second feet.

The Progress Company's rights were purchased by Salt Lake City July 8th, 1931, deed dated May 9th, 1931, for \$30,000 payable in 10 yearly installments, interest rate 5% on deferred payments. The Company transferred to the City all its decreed water rights and title to approximately 5 acres of land at the head of Tanner Springs. The company warranted that it was the owner of all rights conveyed, free and clear of encumbrances.

D E E D

The PROGRESS COMPANY, a corporation organized and existing under the laws of the State of Utah, with its principal place of business at Salt Lake City, County of Salt Lake, State of Utah, Grantor, hereby sells, assigns, transfers and conveys to SALT LAKE CITY, a municipal corporation, of the State of Utah, for the sum of \$10.00 and other good and valuable considerations the following described water rights existing in Salt Lake County, State of Utah, to-wit:

All of the waters of Big Cottonwood Creek, flowing in said stream at a point immediately below the upper intake of the Hill Ditch:

Also all of the waters flowing in Little Green River to be used for power purposes, the plant heretofore operated by the Grantor at or near State Street, Salt Lake County, Utah, and for domestic, culinary and other purposes;

Also all of the waters of Spring Creek in Salt Lake County, Utah, not otherwise decreed and quieted in other parties by the terms of that certain decree made and entered in the Third Judicial District Court of the State of Utah, Salt Lake County, in an action in which the Progress Company, a corporation of the State of Utah, was plaintiff and Salt Lake City et al were defendants, dated April 13th, 1914, and which said decree was affirmed by the Supreme Court of the State of Utah in case No. 2831; said water having been decreed to plaintiff herein for use at its power plant known as the Gordon Plant;

The quantity of water above decreed and hereby granted shall not exceed 150 cubic feet per second of time:

Also that quantity of water decreed to the plaintiff in the above mentioned law suit and in section "Fourth" of said decree, which reads as follows:

"That whenever, during said non-irrigation season, the quantity of water flowing in said Big Cottonwood Creek as aforesaid, exceeds fifty (50) cubic feet per second, the right and title of said plaintiff, Progress Company, is hereby confirmed and quieted to have such excess of water flow down said stream into said Gordon Race, together with all the waters of said Big Cottonwood Creek flowing therein at a point immediately below the upper intake of the Hill Ditch, and the waters of Little Green River and Spring Creek, as provided in the second paragraph of this Decree; the whole, however, not to exceed one hundred and fifty (150) second feet."

This conveyance is intended to transfer from the Grantor to the Grantee all of the rights decreed to the Grantor in Paragraph one of Section "Second" and Paragraph two of Section "Fourth" of the decree of the Third Judicial District Court of the State of Utah above referred to.

The grantor hereby warrants that it is the owner of the rights hereby conveyed, free and clear from all encumbrances and that it has the lawful right and title to make this conveyance.

The officers who sign this deed hereby certify that this deed and the transfer represent thereby was duly authorized under a resolution adopted by the Board of Directors of the Grantor at a lawful meeting duly held and attended by a quorum of said Board.

IN WITNESS WHEREOF, the Grantor has caused its corporate name and seal to be hereunto affixed by its duly authorized officers this 9th day of May, 1931.

THE PROGRESS COMPANY

BY John P. Cahoon
President

ATTEST:

CHESTER P. CAHOON
Secretary

STATE OF UTAH)
COUNTY OF SALT LAKE) SS.

On the 9th day of May, A. D. 1931, personally appeared before me John P. Cahoon and Chester P. Cahoon, who being by me duly sworn, did say that they are the President and Secretary respectively of The Progress Company, and the foregoing instrument was signed in behalf of said corporation by authority of a resolution of its Board of Directors, and said John P. Cahoon and Chester P. Cahoon acknowledged to me that said corporation executed the same.

JOHN B. CAHOON
Notary Public
Residing at Salt Lake City, Utah

My commission expires: June 8, 1934

H. A. Bagley, et al.

The decree of April 13th, 1914, awarded to H. A. Bagley and nineteen others water from Spring Creek for irrigation, domestic, culinary and fish pond purposes in the following amount: during irrigation season 6 sec. ft; during non-irrigation season the amount is not stated. The land to be irrigated is about 360 acres, "owned in severalty by said parties, lying in sections 8, 9, 16 and 17, T. 2 S., R. 1 E., S. L. M., on the south side of the natural channel of said Big Cottonwood Creek, and near the headwaters of said Spring Creek."

Alice E. Moyle

Alice E. Moyle was decreed "the use of the waters from the springs and seeps located upon the land owned by her in Section 16, T. 2 S., R. 1 E., S. L. B & M., for irrigation, culinary, domestic and stock purposes, and for the purpose of raising fish."

Mary J. Miller

Mary J. Miller was decreed the right to the use of one sec. ft. of water from the waters of Spring Creek for irrigation, culinary, domestic and fish-culture purposes; one-half of which may be diverted at a point about 200 yards west of the State Fish Hatchery No. 1, in Section 8, T. 2 S., R. 1 E., S. L. B. & M., and the other one-half at the intersection of 17th South (no 49th South) and 9th East Streets.

RIGHTS ABOVE THE BUTLER DITCH

UTAH LIGHT & RAILWAY COMPANY

The decree of April 13th, 1914 confirmed the right of the Utah Light & Railway Company to take all the waters of Big Cottonwood Creek for power generative purposes at a point approximately 1000 feet above "The Stairs" and to convey such water through pipes and flumes to its power plant, returning it to the creek above the place of diversion of the Brown & Sanford Ditch and the intake to the City's conduit, undiminished in quantity and unimpaired in quality. If sufficient water does not arise in the bed of the stream to supply the amount awarded to the Butler Ditch, diverting above the mouth of the canyon, the Company must allow enough water to flow down the stream to supply the Butler Ditch award.

The Utah Light and Traction Company now operates two power plants under this right. The maximum diversion probably is about 80 sec. ft.

John Branborg, E. Gustave Branborg, and John C. Barnard

The above named parties were decreed, for the purpose of irrigating land adjacent to the creek and other useful purposes, all the water from the Meadow tunnel, the Gustave Adolph Tunnel, and the Clara N. Tunnel in Big Cottonwood Canyon. The water is to be measured where it enters Big Cottonwood creek and to be retaken lower down with a 10% deduction to cover evaporation and seepage losses.

Richard D. Maxfield

Richard D. Maxfield was decreed from Big Cottonwood Creek one sec. ft. of surplus water one day in every 10 to irrigate 7 acres of land and an unstated amount for domestic and culinary purposes at his residence near "The Stairs."

O. W. Powers, et al.

O. W. Powers and 44 others were decreed the right to divert from Big Cottonwood Creek water sufficient for their culinary and domestic purposes during June, July, August and September each year at the cottage of each of them at and near Brighton. Neri Butler also was decreed a small power right, sufficient to operate a churn and a washing machine. All water diverted and not used is to be returned to the stream without contamination or waste.

Maxfield Mining Company

The Maxfield Mining Company was decreed rights as follows: "That the right and title of the Maxfield Mining Company is hereby confirmed and quieted to divert and use all the water of a certain spring situated on the easterly side of Big Cottonwood Creek above the main workings of its mine, for culinary and domestic purposes, and also to take water from said creek above the main workings of its mine for culinary and domestic purposes, and also to take from said creek at the point where it dam is constructed and known as Mill "A", water sufficient to fill a steel pipe 44 inches in diameter and seven hundred (700) feet in length for power purposes; the said water shall be returned to said creek undiminished in quantity and unimpaired in quality."

Taylor-Armstrong Lumber Company

The Taylor-Armstrong Lumber Company was decreed rights as follows: "That the right and title of defendant, Taylor-Armstrong Lumber Company is hereby confirmed and quieted to divert and use sufficient water from said Big Cottonwood Creek for culinary and domestic purposes necessary for the conduct of its hotel at Brighton or Silver Lake, during the months of May, June, July, August and September of each year, through the Walker and Anderson Ditches, but shall return the water not consumed to said creek unimpaired in quality; and moreover the right and title of said company is hereby confirmed to a point three feet above the natural outlet of said Silver Lake, for irrigation about twenty acres of meadow land situated in the west half of the northwest 1/4 of Section 5, T. 2 S., R. 3 E., of the S. 1 Meridian and other useful purposes."

Mountain Lake Mining Company

The Mountain Lake Mining Company was decreed a right as follows: "That the right and title of the Mountain Lake Mining Company is hereby confirmed and quieted to divert and use the waters of said Big Cottonwood Creek for culinary and domestic purposes."

H. A. Bagley, J. W. Bagley, and W. C. Bagley

The Bagleys were decreed a right to divert not to exceed one second foot from each of the following forks or tributaries of Big Cottonwood Creek: Bear Trap Fork, Willow Patch Fork, and Silver Springs Fork. The water is to be used to water 250 head of horses and cattle and to supply culinary and domestic water to the Bagley's camps on their lands adjacent to said tributaries. All water diverted and not consumed is to be returned to Big Cottonwood Creek or its tributaries unimpaired in quality. The right is decreed from the 1st day of June to the 1st day of November in each year.

STORAGE RIGHTS

Salt Lake City's Storage Rights

In the period between 1895 and 1904, J. M. Thomas and H. B. Cole filed on various reservoir sites on certain of the tributaries of Big Cottonwood Creek. These rights were bought by Salt Lake City, January 29th, 1908, for \$2,000. The court decree of April 13th, 1914, confirmed the City's title and defined the rights as follows: a right of 20 cubic feet per second of surplus water at the following locations: Twin Lake Gulch, Lake Mary, Lake Martha, Lake Phoebe, and Dog Lake for such time as may be necessary to keep such reservoirs full, and to release said water and flow it down Big Cottonwood Creek and divert it into its conduit.

The City has constructed a dam at Twin Lakes, storage capacity 306,049,000 gallons, or 939 acre feet, and one at Lakes Phoebe and Mary, storage capacity 241,845,000 gallons, or 742 acre feet. These reservoirs are at a high elevation, therefore, the water stored in them retains its quality; but, because of the small area of the water sheds above them, they cannot be entirely filled in a season following a winter of less than normal snowfall.

In addition to the rights purchased from Cole and Thomas and confirmed by court decree, the City's rights in its Big Cottonwood Reservoirs are protected at the Twin Lakes site by certificate of appropriation #397, granted September 8th, 1916, for the storage of 897.88 acre feet of water, actual capacity of the reservoir is 939 acre feet, and at the Lakes Phoebe-Mary site by certificates of appropriation #445, for 610 acre feet, #447, for 150 acre feet, and #448 for 200 acre feet of storage, all three granted December 15th, 1916, covering storage rights on Lakes Phoebe-Mary, Lake Martha, and Lake Catherine, the water to be impounded by what is known as the Phoebe-Mary Dam. The total granted by the three certificates is 960 acre feet; the capacity of the reservoir is 742 acre feet.

Argents Reservoir Site

On January 25th, 1924, the Department of the Interior granted the City's application for right-of-way for the proposed Argents and Mill D. Reservoirs on government land in Big Cottonwood Canyon. This grant was extended from time to time, the latest extension being to January 15th, 1935.

By an Act of Congress (Public - No. 259 - S 2442 73rd Congress.) the Argenta and Mill D. Reservoir Sites were reserved from all forms of location, entry or appropriation and set aside as a municipal water supply reservoir site, for the use and benefit of the City of Salt Lake City.

Application #11,382 was filed in the State Engineer's office on June 1st, 1933 and applied for 12,000 acre feet of storage in the Argenta Reservoir. This application lapsed January 27th, 1934 and was reinstated November 15, 1934. The State Engineer approved this application on November 27, 1934 with the provision, that work shall commence within six months and that the plans and specifications and all drawings of the Dam shall be submitted for examination not less than six months prior to the beginning of construction. The date set for fully completing the appropriation is Nov. 20th, 1936.

Big Cottonwood Seepage Loss

Considerable water is lost by seepage and evaporation, in the channel of Big Cottonwood Creek between the intake of the City's Conduit, near the mouth of the canyon, and the head of the Green and Walker Ditches, a distance of approximately 2 1/2 miles. The stream bed consists, principally, of gravel, boulders and sand, through which the water seeps away and is lost. During the past winter, whenever there was a surplus of water in the distributing system some water was turned into Big Cottonwood Creek and at times amounted to as much as four second feet for a short period. This water all went into the ground and practically all of it disappeared in the upper mile of this stretch.

The Morse Decree of April 13th, 1914 stated that "the quantity of water flowing in the stream shall be determined by measuring the water flowing into each of the said several canals and ditches and the aggregate of this measurement shall be deemed the total flow of said creek." By this method of measuring the losses in transit were automatically taken into account, likewise any inflow.

In accordance with the various exchange agreements, Salt Lake City at times, diverts all of the water of Big Cottonwood Creek into the conduit, except the Brown and Sanford and the Butler Ditch shares. In order to make a proper distribution of the water it was essential to know what the loss is, at different stages of the stream. The Court Commissioner, Mr. T. F. McDonald informs us, that determinations were made and from the results obtained he has considered that there is a minimum loss of 3.0 second feet when the stream flow is 30 second feet or less and that there is a maximum loss of 12.0 second feet when the stream flow is 120 second feet or more and ranges proportionately between these two stages.

No attempt was made to appropriate the water that was saved, when the channel was dried up below the City Conduit, until May 10th, 1926 when application #9961 was filed with the State Engineer. This application sought to appropriate 6 second feet and covered the portion of channel from the city's weir to the diversion of the Tanner Ditch. The State Engineer approved this application April 21st, 1927. Proof of appropriation was submitted November 19th, 1928 and showed losses varying from 3.8 second feet, when the flow at the head of the section involved was 15.4 second feet, to 8.5 second feet when the flow was 83.6 second feet as measured

over the 30 feet adjustable weir at the mouth of the canyon.

After proof was submitted on application #9961, it was thought best to file another application covering a greater portion of the channel by including the section between the head of the Tanner Ditch and the diversion of the Green Ditch. With this in mind, a verbal request was made to the State Engineer, asking that the issuance of the certificate be held in obedience until such time as another application, to supercede application #9961, could be filed. This request was granted although all fees had been paid covering the issuance of certificate for #9961.

A new application (No. 11,109) was filed July 2nd, 1931, and covered the entire section of channel from the city weir to the Green Ditch diversion. The application was made for 10 second feet or some part thereof and states that the saving outlined can be made when the stream flow, through the section of channel covered, is below the capacity of the Big Cottonwood Conduit, that is 74.3 second feet.

The State Engineer requested reasonable proof that such loss, outlined in the application, actually existed in the channel in question. Determinations of the loss were made in 1933 and on November 9th, 1933, the information was given to the State Engineer. The results of these tests submitted, showed a maximum loss of 10.24 second feet when the stream flow was 106.8 second feet and a minimum loss of 3.06 second feet when the stream flow was 13.0 second feet. Attention of the State Engineer was also called to the Court Commissioner's determinations and his method of apportioning the water of this stream when the exchanges are in operation.

At the time of submitting the above information to the State Engineer, it was thought best to obtain the certificate of appropriation for application #9961 and this was requested. Application #11,109 was modified to eliminate any duplication by stating that the amount of water sought to be appropriated is the difference between the total amount saved and the amount covered by certificate issued under application #9961. The modified application was advertised on August 11th, 1934 and was protested on the grounds that the city had no right to dry the creek, as shrubs and trees on the adjacent lands were dependent upon the seepage water and if this seepage water was taken away the growth would cease to exist and thereby great damage would result.

In answering this protest it was pointed out that in the development of this vast western country, into an agricultural region it has been necessary to divert all the water from streams, where they emerge from the canyons and that if such claims as this were allowed practically all irrigation and development would cease. The State Engineer approved this application on February 4, 1935 and in his letter to the protestant, giving his reasons for disallowing the protest he states "To reject this application for the reasons given in the protest, would be the equivalent of ruling that holders of water rights in any stream may not divert water therefrom because the resulting drying of the lower stream would injure riparian land owners, which of course is contrary to the fundamental doctrines of irrigation law as it has always been recognized in this state."

The date for fully completing the appropriation under application #11,109 has been set as October 30th, 1936.

On January 7, 1935 certificate #2183 was issued by the State Engineer, covering the appropriation under application #9961 and states that the appropriation covers only the period from July 1st to April 30th of the following year, at such times as the flow of the creek is all diverted into Big Cottonwood Conduit, which has a capacity of 74.3 second feet.

In order to accomplish the saving contemplated in these applications, it became necessary to construct pipe lines from the Big Cottonwood Conduit to the Upper Canal and from the Green and Tanner 18" pipe line on 60th South to the head of the Green and Walker Ditches. Both projects were completed in 1934 and were built with labor obtained through the F.E.R.A. The line from the conduit to the Upper Canal is a 15-1/4" I. D. Steel pipe 3400 feet in length and has a capacity of 25 second feet, while the line north from 60th South to the Green Ditch is a 12" O. D. Steel pipe having a capacity of 5 second feet.

Whenever there is sufficient water available from Utah Lake, to satisfy all the exchanges, then water will be pumped through the 60th South Pumping Plant for supplying the Upper Canal, Upper Ellison, Tanner, Bagley-Knudsen and the Walker Ditches with their exchange water and the Green Ditch territory above the East Jordan Canal can be supplied with clear water, through the 12" pipe line, from the Green and Tanner Reservoir and thus make available to Salt Lake City the seepage saving of Big Cottonwood water.

When a scarcity of Utah Lake water prevents the furnishing of water from this source to these upper exchanges or when enough water can be spared from Big Cottonwood Creek to supply these ditches, then the Upper Canal and Upper Ellison Ditch can be supplied with water carried through the B. C. Conduit and the 15- 1/4" pipe line and the Tanner, Bagley-Knudsen, Green and Walker Ditches can be supplied from the Green and Tanner Reservoir through the 18" pipe on 60th South and the 12" pipe running north along Holiday Boulevard to the Green and Walker Ditches, which also will make available to the city, the water saved under applications #9961 and #11,109.

In addition to the ditches above mentioned, with which the city has exchange agreements, there are two others which have not exchanged their Big Cottonwood rights. The Newman Ditch, diverting from the stream near where the Upper Canal pipe line crosses Big Cottonwood creek and the Farr and Harper Ditch which takes out below the Green Ditch diversion. The Newman Ditch can be supplied from the 18" pipe line on 60th South and the Farr and Harper Ditch can be supplied from accretions in the channel above their diversion.

Spring Creek Little Green River and Murray Artesian Basin

The waters arising in the artesian basin, in the form of springs, seeps and following wells make up the water supply of Spring Creek and Little Green River. Spring Creek issues in the form of springs, etc. a short distance west of Highland Drive between 48th and 60th South Streets, and flows northwesterly to its confluence with Big Cottonwood Creek at 48th South and 9th East. Little Green River is fed by springs and seeps and flows northwesterly from near Vine

Street and 9th East to Big Cottonwood Creek near 6th East Street. A portion of this channel is used by the Brown Ditch which diverts its water from Little Cottonwood Creek.

The waters of Spring Creek and Little Green River were considered in the Morse Decree as formerly outlined on pages 30 and 32 hereof and Salt Lake City purchased the Progress Company's right in 1931 but as this was a non-consumptive right, the purchase thereof was accomplished to permit the taking of these waters above the Progress Company's diversion.

Several non-consumptive rights covering the right to raise fish have been inaugurated and perfected since the decree was rendered some of which have been purchased by the city, but no right has been established that can be recognized which would interfere with the diversion of these waters by the city, except some old rights claimed west of State Street which are described on pages 40 and 41 hereof.

The waters from Spring Creek, Little Green River and Big Cottonwood Creek, below the intake of the Hill Ditch are all covered by filings now owned by the city and could be used for culinary purposes if properly treated before being used.

Application #11,556 was filed by the city April 25, 1934 and applied for 15 sec. ft. to be diverted from Big Cottonwood Creek at State Street, from where it was intended to pump the water and carry it north to the Big Ditch, a distance of 2200 feet. This scheme was modified later and on September 4th, 1934, the application was changed to permit the diversion of the water through the Gordon Mill Race which takes out from the left bank of the stream near 7th East Street from where it is carried through the mill race to State Street and north along the West Side of State Street through a 24" pipe to the Big Ditch and is to be used for irrigation. The modified application was approved December 6th, 1934 and date for completion is November 30th, 1937.

The above mentioned 24" pipe line was constructed along State Street and the water was used as outlined in the application during the latter part of the irrigation season of 1934. This enabled the city to supply 1008 acres of the 2279.46 acres under the Big Ditch with their exchange water and thus augmented the city's supply considerably. In the future, Utah Lake water can be saved to the extent that this system is used.

Two applications for water from Spring Creek were made by Leland H. Kimball on May 21, 1930. Application #10,893 called for 10 sec. ft. to be diverted from said creek a short distance east of 9th East and was made for industrial purposes. Application #10,894 called for 10 sec. ft. to be diverted about 1/4 mile upstream from 9th East Street and was made for the same use, but later was amended by adding culinary, domestic use to that of industrial. The city acquired title to these applications in 1931 and have maintained them in good standing by obtaining extensions of time. The date for completion is November 15th, 1935 on application #10,893 and December 10th, 1935 on application #10,894.

On May 25th, 1931 the city filed application #11,092 for 60 second feet of the waters of Big Cottonwood Creek for municipal and domestic use to be diverted a short distance downstream from where Spring Creek enters the channel. This application was protested and on March 25th, 1933 was rejected by the State Engineer. The city appealed to the District Court and the action is now pending. Application #11,093 was filed on May 25th, 1931 and was made for 15 second feet of water from Little Green River to be used for domestic purposes in Salt Lake City. This application was also protested, but notwithstanding, was approved by the State Engineer on the 13th day of April 1933 with the requirement that the appropriation shall be completed by August 15th, 1935. In both of these applications, reference was made to Salt Lake City's purchase of the Progress Company's rights and in each case the State Engineer insisted that such reference be stricken from the application, which was done.

Salt Lake City filed application #11,205 January 23rd, 1932, for 30 second feet of water from wells in the Artesian Basin and embraced Little Green River and Spring Creek underground channels and was made primarily to cover the wells purchased by the city in 1931. The state Engineer returned this application May 10th, 1932 with instructions to strike one of the groups of wells enumerated and to file a new application covering the ones stricken from application #11,205. This was done and the original application for 30 second feet was changed to 20 second feet and application #11,262 was filed and calls for 12 second feet. The original application now covers the State Wells, Association Wells, the Carlston Wells, Reynolds Wells and Miller and Johnson Wells, and the new application (#11,262) covers the 45 wells in the Little Green River Basin, the main group being the Erekson Wells. Both applications were approved by the State Engineer October 4th, 1932 with the provision that proof of beneficial use be submitted by October 10th, 1935. The water from the above wells is gathered in a collecting system and flows by gravity to the pumping plant located at 24th South and 3rd East from where it is pumped into the city's system. The yield from this source was approximately 11.0 second feet during 1934.

Another application for water from underground sources was filed and covers the Hinnen Wells located near the head of Spring Creek. This application (#11,426) is for 10 second feet to be used for domestic and municipal purposes and has a priority date of August 9th, 1933 with proof being due October 20th, 1937. This group of wells yielded approximately 3.0 second feet in the fall of 1933 but diminished to 0.5 second feet in 1934 and at the present time are not being put to use by the city, except to augment the supply of Spring Creek and lower Big Cottonwood Creek.

In addition to the above applications the city owns application #11,546, which was acquired from Leland H. Kimball in 1931. This application is for 15 second feet to be diverted from Big Cottonwood Creek at Main Street and is to be used for industrial purposes. The priority date of this filing is December 15th, 1928 and proof of completion is due October 20th, 1935.

The non-consumptive fish culture filings which are owned by private parties, all divert the water east of 13th East Street and return it to the natural stream above the city's upper point of diversion. These application numbers 2604, 3083, 4152 and 11,052 are listed under "applications" on page hereof.

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WATER RIGHTS ON LOWER BIG COTTONWOOD
CREEK NOT INCLUDED IN DECREE

by
R. C. TOWLER

The Gordon Race was surveyed in the year 1855, and the race constructed in the year 1856, by Archibald and Robert Gardner. This race and mill right was later transferred to Brigham Young, thence to James Gordon, by purchase, in 1872, thence to the Progress Company, in 1904. For a number of years the right was leased to the Morgan and Hanauer Smelting interests by Gordon -- 1878 to 1902.

In 1857-58 Ebenezer Brice, who was a carpenter and mill right employed by the Gardners, was paid a part of his wages in a water right. He acquired a tract of land west of the present 2nd West and south of Big Cottonwood Creek, and constructed a ditch from the Gordon Race westward to his land. Later he transferred by deed his water and land to Andrew Helm. The water has been conveyed and used on the land since construction, continuously.

The tract of land contains about 100 acres; and the principal users of the water are: Andrew Helm, Leroy Park and George Hanson. This ditch diverts approximately 3 second feet of water.

William D. Park was allowed, by Gardner, to divert east across State Street enough water to irrigate a tract of 10 acres. This tract is now subdivided, and not more than two acres is irrigated, and this not continuously. No water was conveyed in this ditch in 1934, and but little in 1933.

Certain interests -- Helm, Snedaker, Hanson and Carlisle -- constructed a dam in Big Cottonwood Creek between the O. S. L. and D. & R. G. W. railroad tracks, in about the year 1892. Water was used through this ditch for 2 years, which extended westward, south of the creek, and then the project was abandoned.

Another diversion was made by Joseph Carlisle, near 4th West, but was later abandoned.

Land east of State Street, at 45th South, have attempted to establish a right from the Gordon Race. This land, owned originally by Fairbourne and Bullock, was irrigated from a diversion of Little Cottonwood Creek, known as the Brown Ditch. The right from the Gordon Race, was constantly disputed by the Gordons, Smelter, and Progress interests. There exists, at the present time, a lateral about one City block east of State Street, the ditch runs north but is in a bad state of repair, and at the present time could not convey more than 1/2 second foot. The Fairbournes and Bullocks lands have been subdivided and are now owned by small interests most of whom irrigate from the Brown Ditch.

Since the closing of the Progress Canal in 1926 there have been openings made in the mill race to water pastures bordering on the canal, but no definite right is recognized.

The testimony of H. W. Brown, in the Progress case, was -- In early years there was no irrigation from the Gordon Race after it got on the bench. I irrigated about 20 acres of pasture from it. Louis Bullock, Edward C. Fairbourne, William D. Park, irrigated some. Between 60 and 78 acres was irrigated by these people, and the irrigation continued to date, when water was in the race.

The total claimed right, on the fairest duty, allowing all, could not be more than 4 second feet.

The right in the so-called "Helm Ditch" running west of State Street is an old established right.

APPLICATIONS IN GOOD STANDING ON BIG COTTONWOOD CREEK, SPRING CREEK AND LITTLE
GREEN RIVER

<u>APPLICATION</u>	<u>OWNER</u>	<u>AMOUNT & PURPOSE</u>	<u>POINT OF DIVERSION</u>	<u>POINT OF RETURN</u>	<u>PRIORITY DATE AND PRESENT STATUS</u>
210	Francis McDonald	10 sec. ft. irr.	Upper Canal	"To enlarge Upper Canal"	October 11, 1904 Proof Submitted 8/17/06 57-5 Pet. for further com. lapsed or vacated since 1909
214	Brown & Sanford Irr.	140 Ac. Ft. At City storage Weir Lake Blanche		57-6	November 5, 1904 Cert. #927 4/27/20
223	Salt Lake	48.8 Sec. City's Conduit ft. Oct. 1st, to Apr. 1st.		57-7	Sept. 26, 1908 Cert. #29-B 10/21/08
1569	Progress Co	60 Sec. Ft. Near Center Power of Sec. 23, T.2.S.R.1 E.		About 500' south of Knudsen's Corner 57-17	June 12th, 1911 Cert. #329 3/28/16
2678	Salt Lake City	610 Ac. Ft. City's Conduit Dom.		2	January 22, 1910 Cert. #446 12/15/16
2880	Salt Lake City	150 Ac. Ft. City's Conduit Dom.		57-30	December 15, 1909 Cert. #447 12/15/16
2895	Salt Lake City	897.68 City's Conduit Ac. Ft. Dom		57-31	January 22, 1910 Cert. #397 9/8/16
2896	Salt Lake City	200 Ac. Ft. City's Conduit Dom.		57-32	December 28th, 1909 Cert. #448 12/15/16
**4149	Ella Thomas Park	1 Sec Ft. Near Knudsen's Corner		57-45	August 1, 1911 Cert. #173 6/23/15
***4784	Ella Thomas Park	0.2 Sec. Near Knudsen's Ft. Corner Maxfield Tunnel		57-46	July 23rd, 1912 Cert. #174 6/23/19
3720	Brown & Sanford	125 Ac. Ft. Brown & Sanford Storage Ditch Lake Blanche			March 2nd, 1912 Lapsed 3/1/35
3721	" " "	" " " " " "		57-41	March 2nd, 1912 Proof submitted 2/26/35 #2341 Cert. 11/29/39

<u>APPLICATION</u>	<u>OWNER</u>	<u>AMOUNT & PURPOSE</u>	<u>POINT OF DIVERSION</u>	<u>POINT OF RETURN</u>	<u>PRIORITY DATE AND PRESENT STATUS</u>
3722	Brown & Sanford	125 Ac. Ft. Storage Lake Blanche	Brown & Sanford Ditch	57-42	March 2nd, 1912 Proof submitted 2/26/35 Cert. No. 2342 11/29/39
8357	Assigned to S.L. City (Leland H. Kimball)	7000 Ac.ft. (Storage Beaver Pond)	Above Head Butler Ditch	—	May 25, 1920 Proof Due 10/14/39
9206	Salt Lake City	50 Sec. Ft. Power	1/2 Mile below Argenta	Near Maxfield Lodge	April 22, 1925 Proof Due 10/15/36
9961	" " "	6 sec. ft. (savings)	City Conduit to Tanner	57-75	May 10th, 1926 Cert. #2183 1/7/35
10040	" " "	50 sec. Ft. Power	1/2 Mile below Argenta	Near Maxfield Lodge	August 27, 1926 Proof Due 10/15/36
10118	Hill Ditch Irr.	3.0 Sec. Ft. Apr. 1st to Oct. 1st	Head Hill Ditch	57-79	February 16, 1927 Cert. #1969 1/14/31
10546	Salt Lake City	15.0 Sec. Ft. Industrial	At Main St.	—	Dec. 15, 1928 Proof Due 10/20/35
11091	Salt Lake City	75.0 Sec. Ft. Dom. & Mun. May 1st to July 15th	City Conduit	—	March 20, 1933 Proof Due 10/20/35
11092	Salt Lake City	60.0 Sec. Ft. Dom. & Mun.	Near 9th E.	—	May 25th, 1931 Rejected (Appeal) 3/25/35 (Taken)
11109	Salt Lake City	10.0 Sec. Ft. (saving)	City Conduit to Green Ditch	57-90	August 7th, 1934 Approved (Appeal Taken) 2/4/35
11382	Salt Lake City	12,000 Ac. Ft. Storage Argenta	City Conduit	57-150	<i>Lapsed</i> June 1st, 1933 Proof Due 11/20/36
11463	Alice E. Lofgren	250 Ac. Ft. Storage Above Lake Blanche	Brown & Sanford Ditch	—	October 10, 1933 Approved (Appeal taken 1/4/35
11556	Salt Lake City	15 Sec. ft. Irrigation	Gordan Mill Race	—	September 4, 1934 Proof Due 11/20/37
11561	Salt Lake City	10 Sec. Ft. (Dom) (Emergency Filing)	City Conduit	—	May 2nd 1934 Proof Due 12/10/37
10033	H. C. Reynolds	10 Sec. Ft. (Fish Culture)	Sp-ring Creek East of 9th East	57-76	August 10, 1926 Cert. 1674 10/11/26

<u>APPLICATION</u>	<u>OWNER</u>	<u>AMOUNT & PURPOSE</u>	<u>POINT OF DIVERSION</u>	<u>POINT OF RETURN</u>	<u>PRIORITY DATE AND PRESENT STATUS</u>
10516	Salt Lake City	5 Sec. Ft. Saving Non-Irr. Season	Butler & Brown-Sanford Ditch (Brown Sanford Saving made by company but Butler ditch still pending)		
1763	State of Utah	7 Sec. Ft. (Fish Culture)	Spring Creek 57-19	Above Head Miller Race	Feb. 20, 1908 Cert. 81-B 10/11/12
2604	J.W. Boyce	6.1 Sec. Ft. (Fish Culture)	Spring Creek 57-27	East of 13th E.	July 28, 1909 Cert. 634 9/5/17
10893	Salt Lake City	10 Sec. Ft. Industrial	Spring Creek East of 9th E.		June 16, 1930 Proof Due 11/15/35
10894	Salt Lake City	10 Sec. Ft. Industrial	Spring Creek East of 9th E.		July 31, 1930 Proof Due 11/10/35
11052	David Gerald Lunn	6 Sec. Ft. (Fish Culture)	Spring Creek 57-89	East of 13th E.	March 25, 1931 Cert. 2153 12/5/33
11053	David Gerald Lunn	2-1/2 Sec. Ft. Fish Culture	Spring Creek	East of 13th East	March 25, 1931 Lapsed 6/18/31
11093	Salt Lake City	15 Sec. Ft. Dom & Mun.	Little Green River		November 19, 1931 Proof Due August 15, 1935
11205	Salt Lake City	20 Sec. Ft. Dom & mun.	Artesian Wells		January 23, 1932 Proof Due October 10, 1935
11262	Salt Lake City	12 Sec. Ft. Dom & Mun	Artesian Wells		June 1, 1932 Proof Due October 10th, 1935
11426	Salt Lake City	10 Sec. Ft. Dom & Mun.	Hinnen Wells		August 9th, 1933 Proof Due October 20, 1937
3083	C. L. Tanner	4.89 Sec. Ft. Fish Culture	Tanner's Pond East of 13th East	57-36	3-22-1910 Cert #178 6/28/15
4162	Geo. E. & W.H. Reese	7.53 Sec. Ft. Fish Culture	Tanner's Pond & Springs East of 13th	57-46	8/8/11 Cert. #564 4/12/17

* Transferred to City in 1923

** Purchased by City 12/15/27

*** Purchased by City 12/15/27

Purchased by Salt Lake City

APPLICATIONS FOR CHANGING THE POINT OF DIVERSION OR USE FOR WATERS OF BIG

COTTONWOOD CREEK WHICH ARE IN GOOD STANDING

<u>APP. NO.</u>	<u>MADE BY</u>	<u>AMOUNT</u>	<u>CHANGES</u>	<u>STATUS</u>
A-534	Salt Lake City 57-6793	65.93 Sec. Ft. Tanner Ditch Right	Pt. of div. from Tanner Ditch to City Conduit and use from Irr. to Dom & Municipal	Filed 2/13/20 Granted 9/3/20
A-535	Salt Lake City 57-6794	26.37 Sec. Ft. Green Ditch Right	Pt of Div. from Green Ditch to City Conduit and Use from Irr. to Dom. and Municipal	Filed 2/13/20
A-874	Brown & Sanford Irr. Company	125 Ac. Ft. Storage 57-42	Place of storage from Lake Blanch #2 to Lake Blanche #1	Granted 4/24/26 Proof under App. #3722 Submitted February 26, 1935
A-930	Salt Lake City	9 Sec. Ft. Upper Ellison Ditch Right 57-8722	Pt. of div. from Up per Ellison to City Conduit and use from Irr. to Dom. and Municipal	Filed 7/21/26 Cert. #4 3/12/29
A-1045	Leland H. Kimball assigned to S. L. C.	700 Ac. Ft. Storage	Use from Irrigation to Dom. Cul. and Municipal	Filed 10/25/28 Proof Due October 14, 1939